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UNIVERSITY OF ALBERTA

THE BEAST THAT WANTED WINGS: AN EXPERIMENTAL INVESTIGATION OF TERROR MANAGEMENT THEORY

BY

SUSAN MORRIS

©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements for the degree of Master of Arts.

DEPARTMENT OF SOCIOLOGY

Edmonton, Alberta
Fall 1992

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Susan Morris
Suite 6, 1565 West 14th Avenue
Vancouver, British Columbia
V6J 2J1

October 05, 1992

The horror of the effortless journey, to the empty land
Which is no land, only emptiness, absence, the Void,
Where those who were men can no longer turn the mind
To distraction, delusion, escape into dream, pretence,
Where the soul is no longer deceived, for there are no
    objects, no tones,
No colours, no forms to distract, to divert the soul
From seeing itself, foully united forever, nothing with
    nothing,
Not what we call death, but what beyond death is not
    death,
We fear, we fear ...

T. S. Eliot
Murder in the Cathedral

UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled The Beast that Wanted Wings: An Experimental Investigation of Terror Management Theory submitted by Susan Morris in partial fulfillment of the requirements for the degree of Masters of Arts.

Michael W. Gillespie
Dr. Michael Gillespie

PASaram
Dr. P.A. Saram

David E. Young
Dr. David E. Young

October 6, 1992

DEDICATION

This thesis is dedicated to all those who have grappled with the insignificance of their life and who have wondered what lay beyond it. More especially, I dedicate this to the one person who taught me to stop long enough each day just to appreciate the splendor of nature and to realize the magnificence of being alive.

ABSTRACT

This thesis project has two principle aims. First, it replicates and extends experimental research conducted by Rosenblatt, Greenberg, and associates (1989) (who work under the umbrella of Terror Management Theory) by proposing a second form of anxiety (exam-failure anxiety) to determine whether the anxiety that the researchers claim operates as the mechanism, is unique to mortality salience or whether it is indicative of a more generalized form of anxiety or frustration. In addition, we substitute the Templer Death Scale in place of the MAACL measure of anxiety in order for our research to have a better measure of anxiety specific to mortality. Another way in which this project extends the research of Rosenblatt et al is by the inclusion of a new set of target figures. The change in target figures serves two purposes: first, to test the robustness of the earlier findings, and second, to capture the outsider in Canadian culture. The figures we propose are derived from Stouffer's civil liberty work (1955). Specifically, we identify three sets of target figures - individuals who espouse the non-existence of religion; people who deny the occurrence of the German Holocaust; and, finally, individuals who argue for the racial inferiority of non-whites. The second aim for this thesis is to broaden the theoretical base of Terror Management Theory by showing the affinities between its theoretical position and that of sociology and existential philosophy. This experimental research supports Terror Management Theory, finding that subjects whose mortality is made salient are particularly motivated to deny targets basic civil liberties (i.e. speaking in public, teaching in colleges and universities, and having books remain in public libraries). The results, however, are conditional on a double dose of mortality salience and the combination of gender and preliminary attitudes toward abortion (for some subjects) or test performance (for other subjects).

ACKNOWLEDGEMENTS

I am very thankful to Dr. Michael Gillespie for the countless hours he spent seeing this project to its completion. His guidance has been invaluable and he has taught me much more than is reflected in this work.

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INTRODUCTION

PREFACE:

The Self in industrial society is typified by experiences of emptiness, meaninglessness, dehumanization and estrangement. But why is modern life not envisioned as meaningful? According to Paul Tillich (1964), reality no longer provides the individual with meaning because "the previous structures and symbol systems no longer express the language of the isolated, modern man". In part this thesis tests whether individuals achieve meaning in the face of death by their identification with culture. More importantly, however, this thesis examines what the significance of death is for a general understanding of human nature.

This project is not an exercise in social thanatology although in an indirect way it is indebted to that field of study. Social thanatology's leading proponent, Elizabeth Kubler-Ross, has established a focal position of death in modern society. But apart from the "recipes" for treating the manifestations of grief, there is a much more basic and significant core to the study of death that has been overlooked - not only by theorists in general but by social thanatology in particular.

Existential philosophy, literature, and to a lesser extent the film industry[1] position the life / death struggle in the forefront of their work. But the ideas often remain as intangible abstractions beyond the reach of man's desperately reaching hand.

In the past twenty years, Ernest Becker and Robert Jay Lifton have transferred the existentialist notions of life, death, meaning and self into the theoretical social psychological literature. Their work, however, remains at the fringes of the field of Social Psychology, and their influence on the field has been surprisingly modest. In fact, in a 1980 review article of the works of Ernest Becker published in the American Journal of Sociology, the entire life-work of Becker is represented by a single lesser work, The Structure of Evil, while his more important works such as The Denial of Death (which won the pulitzer prize for non-fiction literature in 1974) and Escape From Evil, are not even mentioned in the article. The lack of attention paid to Becker's works, and a realization of his significance for the field of psychology and sociology alike, suggests that the denial of death extends to a denial of Becker.[2]

---

[1] In order to demonstrate the prevalence of man's existential concern with death, selected quotations preface each chapter. They are not intended to introduce chapter topics, but rather are included to form a whole of their own: to introduce to the reader a few of the ways man has interpreted his confrontation with his biological limitedness.

[2] Dr. Gillespie has coined the phrase "the Denial of Becker" to describe the review article.

Sociological theory has been equally barren in its exploration of existential concerns, with the notable exception of Weber and Durkheim. Weber and Durkheim's musings on these issues, however, have generally suffered the same fate as Becker and Lifton.

Recently there has been a slight resurgence of interest in the motivational underpinnings of the relationship between death and meaning, but investigations have been scattered and remain at the periphery of theoretical inquiry. From a sociological perspective, Schmitt & Leonard II (1986) have explored participation in the sports world by both competitor and fan as an avenue for the attainment of symbolic immortality. In many ways, the authors' perspective adopts a Liftonian understanding of symbolic immortality as they depict immortality (the "postself" in their terms) as an "idealized role-identity that links the present to the future and to the past" (1986:1088). But immortality achieves more than the connection of man to his selfhood in both past and future, it also unites the individual with the collective as his achievements become an integral part of the social world (in this instance the world of sports). In essence, the researchers conclude, the "social world of sport facilitates the postself by providing occasions, settings, and processes through which its participants can be remembered, eulogized and endeared" (Schmitt & Leonard II, 1986:1090).

Within the field of political sociology, Michael Kearl and Anoel Rinaldi (1983) have conducted some fascinating research on the political uses of the dead. Specifically these researchers investigate the "state's" participation in man's quest for immortality in all spheres of the death process - from the definition of what constitutes death, to the manner by which man is "acceptably" allowed to die, to the power over his resurrection.

In a neighbouring field - Social Psychology in Sociology - Stephen Lyng has investigated meaning, symbolic structure and the challenge to contemporary structures - a process he calls "edgework". Working within the field of Social Psychology in Psychology (and most importantly for this thesis), a team of researchers in the United States have displaced the traditionally theoretical pursuit of existential concerns in the abstract conceptual realm and introduced the issues into a quantifiable, empirical realm (Rosenblatt, Greenberg, Solomon, Pyszczynski & Lyon, 1989). Operating under the heading of Terror Management Theory, this team has generated significant preliminary support for their investigations.

STATEMENT OF THE PROBLEM:

Denial of Death Hypothesis

Based primarily on the ideas of Ernest Becker, Terror Management Theory proposes that the fear of death is the fundamental motivational force underlying all of human agency (Rosenblatt, et al, 1989). As a creature capable of consciousness man has the ability to contemplate the inevitability of his life sentence - that he is heading unabatedly toward death. Moreover, because he has language he is no longer reliant upon instinct as he relates to his environment. Rather, when confronted he uses his imagination and creativity to assume an offensive position which enables him to offset his vulnerability. But accompanying this gift of consciousness is man's greatest weakness.

Why should man's ability for consciousness debilitate us? The answer, according to Becker, lies in the fact that he is not "straightforwardly either beast or angel"[3]. Consciousness allows man to strive to the realm of deities but his physical existence anchors him in the world of decay and death. It is a great paradox! That is, consciousness not only allows man to creatively overcome threatening situations, but also provides him with the ability to imagine his own death. In this incongruity arises his greatest fear; the tumultuous fact that, in some inconceivable way to his heroic aspirations to be god, he is not god. To face this contradiction between god and humanity, between angel and beast, is too much. So we deny, we repress, our fear of death (Becker, 1973).

---

[3] The title for this thesis is derived from this notion in Becker's work.

One final idea from Becker deserves consideration here. In The Denial of Death Becker emphasizes the link between meaning and mortality. For him death is the problem of meaning on a symbolic level. In order to obtain meaning, one must disengage oneself as completely as possible from one's own mortality. The need for disengagement of this sort provides motivation for linking oneself to one's culture vis-a-vis secular or religious affiliations. Becker warns, however, that identification of this sort provides us only with an illusion. We find protection from the ultimate terror of death, but we do not realize that our protection comes at the cost of diminished self-awareness.

Consistent with the ideas of Becker are those advanced by Robert Jay Lifton. Although Lifton's ideas are formally unrecognized by Terror Management Theory they do provide a central base for Terror Management Theory's theoretical position. Like Becker, Lifton also stresses the centrality of the knowledge of death. But in the Liftonian perspective immortality does not have to be equitable to an illusion covering the fact of death, rather Lifton argues that knowledge of death is the key element in connection to our immediate ancestors, our immediate offspring and our species as a whole. He writes:

> A sense of immortality ... is by no means denial of death, though denial and numbing are rarely absent. Rather it is a corollary of the knowledge of death itself, and reflects a compelling and

> universal inner quest for a continuous symbolic relationship to what has gone before and what will continue after our finite individual lives (Lifton, 1984).

Dissimilarities aside, both Lifton and Becker would emphasize the focal role of culture in man's understanding of mortality and immortality. Terror Management Theory more closely echoes Becker's position than Lifton's on this issue but elements of both are traceable in Terror Management Theory's work. The fundamental premise underlying Terror Management Theory is the belief that "culture"[4] operates as modern man's most crucial buffering device, a device that enables him to escape from the circle of limitedness, finitude, helplessness and insignificance; an escape from his physicality. Terror Management Theory further argues that culture functions as an anxiety-buffering device by providing society's members with a complex system of transcendent symbols with which they can identify. Culture - an anxiety buffering device - is by no means a new shield for our anxiety. It appears new only because of the change in form from a predominantly religious orientation to a more secular structure.

Traditionally, transcendent symbols were associated with religious doctrines but these religious symbol systems have steadily been replaced by more secular symbols: symbols that are identifiers of a particular nation state (which can itself become a symbol) - such as the flag, the anthem, or the leader. Whether religious or secular in form, the symbolic system implicitly claims the timeless transcendence of the culture (Kearl & Rinaldi, 1983). Cultural worldviews[5], as 'socially constructed fictions', are very malleable. As such they are always vulnerable to competing worldviews. Therefore, worldviews require constant social validation in order to ensure the potency and viability of the 'ruling' worldview (Rosenblatt et al, 1989). But in order for culture to successfully perform the task of anxiety-buffer for the individual he must:

---

[4] "Culture" is fully discussed and defined from several theoretical disciplines in the Conceptual chapter of this thesis.

> (a) believe in the validity of the cultural worldview and the standards and values associated with that worldview; and,
>
> (b) believe that he is meeting or exceeding those standards and values (Rosenblatt et al, 1989:681).

One consequence of the vulnerability of the immortality structure is the presence of statements or actions aimed at reaffirming the sacredness and ideological structure of the nation-state culture while simultaneously debasing those ideas that contradict it. Individuals or categories of individuals who either express ideas directly antithetical to the cultural worldview or that appear, even indirectly, to threaten the cultural worldview are usually marginalized. Marginalization of opponents (actual or constructed) thus becomes in this interpretation a strategy to isolate threats to the immortality power of the culture. The success of a particular marginalization strategy (or "buffering" strategy in Terror Management Theory's terms) depends in large part upon the cohesiveness of the central cultural worldview, the level of threat to that worldview, the identifiability of the threat to a particular group of people, and to a lesser extent (although not necessarily less significant) on a host of economic and demographic background variables. In order to test the "buffering" agency of culture in the face of incoming threats to our sense of symbolic immortality, Terror Management Theory conducted a series of experiments in which they examined the effects of mortality awareness[6] in a variety of situationally specific and potentially perceivable threatening (either morally or physically) scenarios. Specifically, these researchers hypothesized that when an individual's mortality is made salient, the individual will be motivated to increase the punishment of those he perceives as violators of his cultural belief system and will be similarly motivated to increase the reward of those who uphold what he believes are the collective cultural values of his society.

---

[5] The notion of a 'worldview' is borrowed from the German conception of a 'world vision' or "Weltanschauung' comprised of "the set of beliefs constituting an outlook on the world characteristic of a particular social group" (Abercrombie, Hill and Turner, 1986:235). Social group can be as narrow as a triad or as expansive as an entire species, though typically it is defined along social classes, national boundaries or religious sects.

---

[6] These researchers further argue that the awareness of mortality elicits anxiety of death and that it is this anxiety that prompts behavioral change.

AIMS OF THESIS:

Essentially, this thesis has two primary goals. First, this thesis aims to broaden the theoretical base of Terror Management Theory by linking it to sociological theory and by strengthening the connection already implied to the domain of philosophical theory and social-psychological theory. Second, this thesis will replicate and extend Terror Management Theory's (Rosenblatt et als, 1989) experimental work by testing an alternative form of anxiety and by introducing a new array of potentially perceived violators and supporters of Canadian culture[7].

Broadening of Theoretical Framework

The theoretical base of Terror Management Theory is anchored primarily to the ideas of Ernest Becker. Overall, Terror Management Theory is characterized by a general neglect for theoretical influences outside the arena of psychological theory. Even such direct links from Becker to those of Robert Jay Lifton have been omitted.

---

[7] Analysis of the data is limited to one set of dependent variables - tolerance items - in order that this thesis take on a size of a reasonable dimension. Future analysis of the data will examine the other sets of dependent varaibles included in the survey instrument - crime scenarios and admiration of public personalities.

Re-rooting Terror Management Theory into the broader theoretical framework spanning the disciplines of sociology, philosophy and psychology is one of the primary aims of this thesis. Such an expansion is intended to accomplish three aims. First, the significance of mortality and immortality structures as a motivational aspect of human nature and as a heightening of self-awareness will be raised within the discipline of Sociology. Second, some of the artificial barriers that segregate related disciplines may be removed. Finally, Terror Management Theory's theoretical underpinnings will be strengthened and new conceptual apparatus will be introduced from which new hypotheses can be generated.

Replication and Extension

Two refinements of the design used by Rosenblatt et al (1989) are proposed. First, although a forced-choice measure of death anxiety is used to make mortality salient in some conditions and increase mortality salience in others (by administering these questions prior to the questions designed to measure the dependent variables), the Templer Death Scale is administered to respondents in all conditions[8].

---

[8] The forced-choice questions consist of nine statements taken from the Templer Fear of Death Scale. While the original scale contains 18 items, nine were eliminated due to their ambiguity in wording. The selection was agreed to by both Dr. Gillespie and myself. The open-ended questions

The Templer Death Scale serves two purposes. First, it acts as a validation check of the open-ended mortality questions. Second, the scale heightens mortality anxiety in some conditions and introduces it into several other conditions[9]. As such it is expected that the researcher will be able to disentangle the degree of death awareness required to produce behavioral change and verify the open-ended questions comprising the Mortality Salience Instrument as a successful stimulus for inducing consciousness of mortality.

The second refinement to Rosenblatt et al's (1989) prostitution experiments is the introduction of a second form of anxiety - exam failure anxiety - which is seemingly unrelated to death anxiety[10]. This form of anxiety seemed pertinent because of the student composition of the sample. The inclusion of two forms of anxiety in the experimental

---

consist of the two employed by Rosenblatt et al (1989) addressing the physical and emotional aspects of death, as well as a third question added to address the spiritual aspect of death.

[9] For a more detailed discussion of the various experimental conditions and a more precise review of the manner in which the Templer Death Scale operates, refer to the Methodology chapter of this thesis.

[10] While Becker argues (1973) that channelling death fears into seemingly more manageable sources of anxiety (such as exam anxiety) is a common death denial strategy, it is hypothesized that mortality salience will have a significantly stronger effect than exam failure salience because of the central role that the fear of death plays in Terror Management Theory.

design enables the researcher to determine whether anxiety aroused by a source other than death exhibits a comparable influence on the subject's treatment of perceived violators and supporters of the dominant cultural worldview or whether there exists some unique aspect of death anxiety that provides the motivation to alter behaviour. If the latter is true, considerable strength will be derived for the premises of Terror Management Theory and Becker's Denial of Death Hypothesis. This is especially important as, to date, the experimental work of Rosenblatt et al (1989) has failed to establish mortality anxiety as the mechanism transporting mortality awareness into punitive behaviour of perceived violators of the common cultural fabric.

Parallel to the mortality salience manipulations, exam failure is made salient by two means. First, it is made salient in some of the experimental conditions by three open-ended questions (posed in similar wording and format to the open-ended mortality salience questions). Second, in order to have a measure comparable to the Templer Death Scale, a cognitive test instrument was created from a series of problems taken from recent LSAT and GMAT practice examinations. Although subjects in all experimental conditions completed these "cognitive" test questions, the questions are placed prior to the measures of the dependent variables in only half of the conditions. In these instances (cognitive test before the dependent variables), the cognitive test heightens exam failure anxiety for those conditions that also test anxiety by the exam-failure open-ended manipulation and introduces exam-failure anxiety into those conditions that test anxiety by the open-ended mortality salience manipulation or by the no-anxiety instrument.

As the research proposed is, in part, a replication of Terror Management Theory, the central hypothesis of Rosenblatt et al (1989) is again tested in this thesis. Their hypothesis states that:

> when individuals are reminded of their own mortality, they are especially motivated to maintain their cultural anxiety buffer, and thus are especially punitive toward those who violate it (1989:682).

This thesis also intends to extend the body of research generated by Terror Management Theory proponents. Therefore, based on the methodological alterations outlined above, a second two-part hypothesis is examined:

> (a) Individuals who complete the Templer Death Scale prior to responding to the dependent variables (in conditions where there are no open-ended mortality salience questions) will show results supportive of the open-ended mortality anxiety instrument. That is, subjects whose mortality has been made salient by the Templer Death Scale will be especially motivated to maintain their cultural anxiety buffer and thus will be more intolerant of those they perceive to violate their cultural worldview.
>
> (b) If, as Terror Management Theory suggests, increased intolerance is the consequence of a motivation to maintain our cultural anxiety buffer, then it is further predicted that exam anxiety will not significantly affect intolerance of perceived violators of the cultural worldview.

CHAPTER SUMMARY

Terror Management Theory, at both the theoretical level and the experimental level, has shown evidence of great explanatory potential. Its straightforward premise that human conduct can largely be explained by the relationship of the individual to his cultural framework appears to be almost over-encompassing; that is, there is an over-simplicity, a quality of generality to the theoretical explanation. However, to date the specific hypotheses derived from this general framework that focus on the anxiety buffering function of the cultural worldview have received considerable empirical support. In fact, support has been generated for this hypothesis even when the target figures pose only indirect challenges to the subject's cultural worldview.

Despite the general prevalence of evidence backing the Terror Management Theory thesis, the explanatory power is somewhat restricted by the failure of Terror Management Theory researchers to test an alternative form of anxiety and by the insufficient evidence supporting mortality anxiety as the mechanism producing behavioral change. The first limitation is rectified by introducing exam failure anxiety into the experimental design. The consideration of a second source of anxiety will eliminate a number of potential alternative explanations and will strengthen (if evidence is found as predicted) the supposition that behavioral change occurs as the consequence of mortality salience. An attempt is made to eliminate the second limitation by introducing the Templer Death Scale between the open-ended mortality salience questions and the dependent variable to see whether there is any evidence that anxiety specific to mortality salience is in operation.

CONCEPTUAL FRAMEWORK

The contents of the following chapter span four disciplines of study - existential philosophy, existential psychology, social psychology, and sociology - in an attempt to establish the affinity among theoretical positions. The theoretical position of Terror Management Theory would be well advised to consider its neighbouring fields as they often express considerable insight into the very essences currently being explored by Terror Management Theory.

As the realm to be covered here is vast, this chapter will be arranged around four governing problems. Each will be considered separately but the overall framework and argument being established as set out in the aims of this thesis should not be lost amid the specific arguments pertaining to each conceptual issue to be presented.

The first area covers a historical review of the changing character of immortality structures as they emerge from the realm of the sacred into the increasingly rationalized and secular realm of everyday life. The second task for this chapter will be to argue the case for Culture (as represented by the nation state) as a viable and pervasive form of symbolic immortality. From here this chapter explores the processes and motivations underlying human agency as individuals form an identification with a nation state culture and transfer their hopes for private forms of immortality over to more collective avenues of immortality. In order to explore these areas, Becker's idea of the "driveness toward cosmic specialness", the role of guilt and anxiety, and the failure of the "Other" as an informant of the death experience will be presented[11]. Finally, the manner by which the 'Outsider' (deviant) becomes the key figure in man's displacement of his own anxieties is investigated.

THE CHARACTER OF IMMORTALITY: FROM SACRED TO SECULAR

Over the history of the life of man we witness an ever-constant quest for an understanding of what lies beyond our biological existence. We can trace this pursuit "back to the dawn of civilization, [or at least] back to the Epic of Gilgamesh (pre-6000 b.c.), [wherein] we find that all-too-human hero embarking on his spiritual voyage ... in the quest for the secret of immortality" (Heidel, 1949). Since that time man has invented a variety of mechanisms to offer him and his fellow-men the reassurance that there is some supernatural order that governs their existence; that an "Other Power" can impart to each of them a life in the beyond. The form this Other Power assumes depends primarily on the relationships of men to one another, their level of technology, and their need for tangible reassurance that the immortality ideology with which they identify provides them with transcendent power (immortality power).

---

[11] "Other" in philosophical theory is used to represent an individual or group of individuals who assume the role of referent for the acting individual. In some ways it is similar to Mead's notion of a "generalized other" - the referent to whom man looks as a guide to his understanding of the shared set of rules and notions about appropriate conduct or behaviour, and publicly affirmed attitudinal dispositions.

Ernest Becker (1975) makes a useful distinction that enables us to more clearly trace the development of immortality strategies over history: the differentiation between the visible and the invisible world. The invisible realm is the religious realm: the area of spirits, gods and other imperceptible powers. At this level, an unquestioning faith is paramount because there exists no direct manner by which man can determine whether his actions are sufficient for gaining the benevolence of the Power - of being granted immortality.

The visible realm, by contrast, is the secular realm: it is the world of kings, popes, shamans, political leaders and individual heroes. The transference of immortality power into the secular world enables man to measure how his "sacrifices", his "hard labour", or his "unfaltering trust" in the visible "deity" is received and thus he can keep for himself a ledger of his transcendence potential. In such a scheme the roaring fear of death can be considerably quieted. That fear, however, can be easily awakened if the "visible deity's" viability as a benefactor of immortality lessens or is effectively challenged.

While there is evidence of both invisible and visible realms at this moment, there has been an increasingly rapid transformation from a world characterized by invisible benefactors of immortality to visible gatekeepers of our immortality. Typically, societies can be categorized into one of the following four types (though this categorization is clearly an oversimplification of the diversity of structures man creates and employs to divest mortality of its horror and permanence). In some societies (often referred to by early sociological theorists as 'primitive') the rites and rituals of magic play a crucial role in the society's members understanding of the external forces governing life and death. Control over these external agents is minimal, if present at all.

In other societies (still deemed as 'primitive') the society's members believe in the powers of magic, but the 'average' individual no longer knows the objects of power. A shaman-like figure emerges to act as intermediary between the sacred and profane worlds. Thus for the first time the Powers of the Other world have a spokesperson in the "being-in-the-world"[12] of man.

There are still other societies (now coined as 'modern' or 'industrial') where magic has been divested of its power. In fact, anyone claiming to possess magical powers becomes marginalized from that society as the witch hunts of the early 1600s would attest. But if magic is no longer functionally present, what object, person or ritualized ceremony now assumes the role of transmitting to society's members a reassurance that the external forces are appeased? The answer is the formal institution (i.e. the church). Sacrificial offerings, symbolic dances and spirit possessed objects associated with traditional magic are replaced by a codified system of 'moral' rules that dictate the expectations and demands of the "Other Power" (a force that often can be translated to "God"). The representatives of these institutions believe that they have surpassed the realm of magic because they have imposed order on the previously chaotic and lawlessness of the external forces. Despite their claim to have hurled the masses out of 'paganism', however, 'magical thinking' is still widely prevalent in modern society as the popularity of tabloids would suggest. In fact, the parallel between the magic of the 'past' and the institutionalized religion of the modern world is striking[13].

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[12] This is a term employed by existential philosophers to capture the essence of existing in reality as it pertains to the actual physical world surrounding man.

Finally, since the dawn of the modern era, some societies (now labelled as post-industrial, advanced, or post-modern) have eliminated the essence of these institutional arrangements as interpreters of, and reassurances against, man's most basic existential fears. The rationalization of technology has infiltrated even the most sacred areas of life and has cast religious explanations of death as myth without offering any explanation of its own. In effect the supernatural solution to the fear of death has been evicted. But as Jean Baudrillard (1982) warns, while our modern progression toward a continually more expansive and "personal" structuring of our universe may console us with promises of control over our creatureliness, we must be wary that as we project ourselves into the realm of Gods we simultaneously assume the burden of responsibility of our own mortality and that of those with whom we connect.

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[13] In particular, note the affinity between the following aspects of 'modern institutionalized religion' and magic: the crucifixion of Christ (a sacrificial offering for mankind's sins), the re-enactment of the nativity play (a symbolic dance of sorts), and the investment of the wine and bread at communion with the physical presence of Christ's blood and body, or the sacredness of the crucifix (are these not symbolic spirit possession of objects?).

That is, there is a danger of making Gods of ourselves; of making ourselves "stick out too much" (Becker, 1975). The reason it is so dangerous, if we heed the warning of Margaret Atwood in Surfacing, is that if we overlay creatures with godliness we will at some point be faced with the question, what does it mean when these creatures die? Our entire faith in our immortality power will die as well. Therefore, it is essential that we maintain, no matter how minimal, at least a hairline distinction between creatureliness and godliness so that we can rely on that distinction to save ourselves from the inevitability of our own mortality.

The trend toward increasing secularization, and an increasing presentation of self in the visible world, raises the question whether God is dead in the contemporary world or whether he is just no longer recognizable to us. Daniel Bell (1984) argues for the latter interpretation, noting that our apparent witness of a decline in religion is really only our observation that the arena that we call religious or sacred is declining.

The diminishment of the sacred world is important for this thesis because it forces us to address what has arisen in the place of God. However, before this issue can be addressed it is first necessary to assess the function of religion. Bell (1984) argues that religion operates as a framework by which individuals are given meaning - it provides a system of shared sentiments about the nature of the world, of life, and of death. Thus, our belief in religion provides meaning and purpose to our lives. It would appear from this line of argument that without religion our lives would also be devoid of meaning.

But we must not be too quick to assume that religion is the only force that brings meaning to our life. Tillich (1964) suggests that the boundary drawn between the sacred and the secular may have been not only over-emphasized, but to a great extent, imaginary. Religion and culture are not two entities which can be isolated, rather he claims that they are forever intertwined.

> Religion as ultimate concern is the meaning-giving substance of culture, and culture is the totality of forms in which the basic concern of religion expresses itself. In abbreviation: religion is the substance of culture, culture is the form of religion (Tillich, 1964:42).

Other authors have similarly argued that the domains of the sacred and the profane have been artificially separated. But this clarification does not require a restructuring of our relationship to meaning, rather it changes only the facade by which the symbolic form of meaning is expressed.

> Beliefs [are] not fixed and final realities; they vary from period to period, from one social form to another. What is fixed is the principle of a 'dominant immortality ideology' (Becker, 1975:64).

Durkheim's conceptualization of religion and culture highlights and reaffirms the flexibility and protean nature of our symbolic structures emphasized by Becker. As Durkheim (1961) writes, our immortality structures are always changing, always malleable, and always in a state of metamorphosis. Despite the protean character of immortality structures over history, they have, nevertheless, always existed in some form. Whether characterized by magic rites and sacred rituals within a very invisible and allusive framework or whether indicated by codified written legislations and rationalized technological inventions within a very visible structure, man has always constructed a symbolic network to capture and deflect threats to his immortality.

CULTURE AS A FORM OF SYMBOLIC IMMORTALITY

The guiding question for this section can be expressed in two parts: (1) Does the Nation State govern immortality?; and, (2) Even if a collective cultural worldview can be established as a viable buffering agent against mortality anxieties, is there sufficient evidence that a unified cultural worldview exists in the Canadian context?

According to Kearl and Rinaldi the "state has inherited the traditional religious task of maintaining the ideologies of death fears and transcendence as mechanisms of social control" (1983:693). How does the state provide transcendent symbol systems for its members? These authors argue that the culture of the nation state dictates by its moral order the regulation of who dies, how they die, when they die, and what contributes to their death. One only has to think of the contentious issues of euthanasia, abortion, capital punishment, and extended funding to nursing homes, (all of which have been debated by contemporary governments) to see the extent to which the nation state participates in the regulation of our deaths. Kearl and Rinaldi postulate that such regulation "addresses modern man's anxieties of meaningless death and [his fear of] personal extinction" (1983:698).

These authors further argue that the state provides the individual with both "spatial" and "temporal" forms of transcendence. Temporal examples of transcendence can be witnessed when figures of the past become venerated in the present for their contributions to either the moral fabric of society or to the physical elements within that society. Resurrections of individuals living in past times provides a bridge that links the past to the present and gives individuals in the present a connection to their ancestry. And in so doing, the societal culture is conveyed as a stable and successful orientation toward life that has the capacity to survive amid changing historical circumstances.

As we saw earlier, Kearl and Rinaldi argued that the state confers a sense of "cosmic specialness"[14] to the individual (as he identifies himself as a member of a successful and surviving national ideology) and assures him that his life will be treated as sacred - with access to every possible life preserver made available by the technological era. One shortcoming of their discussion of the nation state assuming the role of religion with regards to becoming a protectorate over death is that they do not address why the representatives of the nation state would want to assume that responsibility. These researchers also fail to explore how a society's citizenry transferred the association of immortality ideologies and their own aspirations for personal transcendence from the church to the nation state.

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[14] This concept is derived from Becker and will be discussed in detail later in this chapter.

Kearl and Rinaldi's emphasis on connection echoes the primacy it receives in Lifton's conceptual framework, particularly as it appears in his discussion of the biosocial mode of symbolic immortality at the ultimate level of experience. For Lifton (1976) the psychoformative process of man is an ongoing struggle between polar ends of three dimensions of man's relationship to his self and others. The dichotomous structure of the dimensions represent life and death equivalents. The first of the three polarities is that of connection - separation[15]. Connection and separation, as is also true of the other two dimensions, occurs at both proximate (within-the-world) and ultimate (beyond-the-mundane-world in the sphere of symbolic representation) levels of experience. Connection captures man's identification with his fellow men in all temporal dimensions (past, present and future) and also extends to his attachment to the spiritual and supernatural world beyond him[16].

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[15] The two remaining dimensions are: integrity / disintegration, and movement / stasis.

[16] Separation, by contrast, is the loss of ties, the loss of association with others or with one's surroundings. It is an isolation in space and time, and thus, is a symbolic equivalent of death.

In pursuit of immortality power, Lifton (1976) argues that the biosocial mode[17] - connection to one's fellowmen - is one of the primary mechanisms man employs to attain a symbolic representation of his immortality. He draws lines to his past through the accomplishment of genealogical forefathers or to the attainments and past conquests of the culture to which he belongs. While man typically projects himself into the proximate future through offspring and material means of heredity, it is also possible for him to achieve a more global sense of connection at the community level or perhaps even beyond that to the level of species (Lifton, 1976). Symbolically, connection is everlasting life, it is continual association with the lives of others as the barriers of temporality are defied: connection is living.

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[17] Lifton (1976) also identifies three other modes of symbolic immortality - the natural mode, the theological mode and the creative mode. The creative mode will be elaborated upon in upcoming sections. The theological and natural modes of symbolic immortality require a brief summary here as they are not dealt with elsewhere in the paper. The theological notion of life after death (though not necessarily as the literal expression "afterlife") specifically incorporates, as a symbolic mode of immortality, that the individual "be in harmony with a principle extending beyond his limited biological life span "(Lifton, 1976:33). The natural mode of symbolic immortality rests on the premise that from nature we begin, to nature we return. It is accompanied by the belief that this cyclical process will continue uninterrupted to the end of time. It is a belief in the unlimited repletive powers of nature.

CULTURE DEFINED

Becker's notion of culture is not solely a detail of the constituents of culture but rather is an exploration of how culture functions as a hero-system, of how it transports immortality into the visible realm, of how it functions as an "antidote to terror". The following rather lengthy quote from The Denial of Death summarizes the essence of Becker's conceptualization and provides the operational definition of culture for this thesis:

> [Culture is] a symbolic action system, a structure of statuses and roles, customs and rules for behaviour, designed to serve as a vehicle for earthly heroism. ... Each cultural system is a dramatization of earthly heroics; each system cuts out roles for performances of various degrees of heroism ... It doesn't matter whether the cultural hero-system is frankly magical, religious, and primitive or secular, scientific, and civilized. It is still a mythical hero-system in which people serve in order to earn a feeling of primary value, of cosmic specialness, of ultimate usefulness to creation, of unshakable meaning.(1973:4-5).

Here culture is portrayed in its more functional form. Becker's functional emphasis is similarly echoed by Daniel Bell. For Bell, culture is the "area of expressive symbolism which seeks to explore the meaning of experience in an imaginative form" (1984:358). Different historical periods have yielded different expressions, but all are interpretations of the core existential questions developed into a cohesive symbolic structure. The pivotal concern is always: How does one meet death?

It has been argued by others, most persuasively by Karl

Marx, that the symbolic fabrication which we call "culture" is merely a construction developed by the powerful to maintain their superordinate position and to keep the powerless enslaved. If the chains of their enslavement are made from false promises of potential immortality, so be it. Becker, however, does not agree with this association of power and enslavement. Rather he argues that it is not the power differential that enslaves people, but man himself who offers himself to the service of a hero (religious or secular) in the sheer hope that the immortality power associated with the hero may, at least partially, encapsulate the worshipper as well. Becker writes:

> Culture ... continues the causa sui project of the transcendence of death, and so we see the fatality and naturalness of human slavishness: man helps secure his own domination by the tribe, the polis, the state, the gods, because of his fears (1975:126).

While Becker makes a convincing argument that man enslaves himself by worshipping another, it may be equally true that those in a position of power are defining what constitutes heroic qualities, so that their own attributes are reflected. Subordination or enslavement thus may still be the consequence of an unbalanced power arrangement.

In either framework, culture can be interpreted as a visible immortality structure because the immortality power rests in the personage of the leader or its leading political institutions. On a more structural level culture provides individuals with a tangible avenue for achieving transcendence. Buildings and monuments dedicated to specific individuals, or works of art and literature, are perhaps the most pervasive of the tangible avenues to immortality.

Having thus theoretically defined the function and mechanisms of culture, we now need to assess whether there exists a cultural worldview for the Canadian context? Attempting to outline a single cultural worldview in a Canadian context is especially difficult. Our policies of multiethnicity, multiculturalism, and the recognition of distinctiveness for the Quebecois and the first peoples do not in any way point to a unified "culture" with which all members of our society could identify. And yet ... We adamantly distinguish ourselves from our American neighbours; we speak of the betrayal of "cross-border" shoppers, of the defection of our educated to the other side of the 49th parallel, and give loud disapproval of our Prime Minister sheepishly following the directives of his American counterpart.

Why, if we have no "cultural" identity, would we be so sensitive to these events? Perhaps the identity of Canadian culture rests in the very multidimensionality of its cultural character. Where else is there such a wide respect for "Otherness"? In what other country do we find such a concerted effort to accommodate the uniqueness of such a diverse array of individuals?

In the recently tabled Canadian constitution proposal, a fairly clear portrait of Canadian culture can be derived. Several statements from the Constitution proposal are reported to capture this essence:

> Canada today is a society of freedom, tolerance and compassion (1991:v, my emphasis);

second,

> ...[Canadian culture] reflects our true values and allows us to achieve our common goals and objectives [such as freedom, tolerance, compassion and prosperity, to name a few] while respecting our diversity (1991:iii);

and finally,

> ... [It is the aim of the] federation for the 21st century ... to be a federation that reinforces and expresses the many-sided character of Canada itself; a homeland of many peoples including the First Peoples, a land of two linguistic majorities, a land of diverse regions, a free and democratic society, a land which is respectful of differences, a strong economic union, a sharing community providing equality of opportunity and economic security for all its people, an important player on the international stage (1991:vii).

From these statements we can construct a definition of culture as: the reflection of the values commonly held by the members of a nation, especially as they contribute to define the national character, and an agreement of the general directives that the nation's members perceive as essential for the nation's continuance in the future.

Defining culture in this fashion does not require that all members of society wholeheartedly support each and every aspect of the cultural fabric or that the future of the nation can be clearly defined as the product of path A and path B. However, the very fact that a set of general characteristics can be defined in describing a culture would suggest that the members of a society exhibit sufficient homogeneity in their values to be conceived as a "collectivity" in ideological terms. Diversity and plurality of values (even if at times in opposition to one another) do not exclude the possibility of a national culture existing above specific value niches. Probably most cultures have a hierarchical value structure that delineates the unique composite of its people but which allows an umbrella-like value system that does not jeopardize the mosaic pattern underneath it. The notion of a relatively unique Canadian culture will be touched on again in the methodology chapter of this thesis.

TRANSFERENCE OF IMMORTALITY POWER

In contrast to Kearl and Rinaldi's failure to detail the mechanisms of transference present between the individual and the state, Weber (1970) provides a theory on the transference process. He argues that protestantism itself spurred the transformation from religious to secular symbol systems. The change from a pre-capitalist to a capitalist system as achieved vis-a-vis the tenets of protestantism - a capitalist system unique to modernity - was accompanied by a change in the conceptualization of morality as transcendent to morality as an obligation to the present. That is, the issue of "am I going to live or die in eternity?" gets manifested in the asceticism of "this-world" rather than in the asceticism of the "other-world" that characterized pre-modern capitalism societies (Weber, 1970).

Up to this point, theoretical positions have generally glossed over the process by which man constructs the symbolic structure called culture and how it is unleashed from man's control like a beast that turns on its master. Durkheim is exceptional in this regard.

The development of the disengagement of man's ideas and beliefs from his being undergo a process similar to the following description. Individuals hold beliefs and ideals about the world and about their relationship to it. In a community context, these ideas and beliefs are challenged, remoulded or reaffirmed as individuals interact with each other and communicate their individual "worldviews". Taken together, these individual sentiments disengage themselves from the independent individual and develop into a collective consciousness - a representation of the shared ideas of that society[18]. Once individual consciousness per se has been projected outside the individual into the form of a collective consciousness, the latter must re-root itself in the world of the individuals so that it may be experienced by them. The sentiments thus become objectified - symbolized in the material world - by being fixed upon some physical object.

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[18] This "sharedness" does not imply that every individual or sub-group of individuals' ideas are equally represented nor that power relations are not present. Rather it may represent at a very general level a consensual approach to the ideals of what is good and just. Sub-groups do exist, of course, presenting themselves as diametrically opposed to the prevailing shared consciousness. However, if

The noteworthy point here is that society - the collective - is not an entity that creates and recreates itself: the state is not to be reified. Rather society, according to Durkheim, is "the idea which it forms of itself" (1961). But since this "idea" presents itself as external to the individual, there must be a mechanism by which the members of that society can experience and internalize that "idea". This is the function of the sanctification of physical "within-this-world" objects.

The question to be addressed, then, is how religion itself becomes involved in the relationship between individual and society? Durkheim argues that religion arises from the following process:

> When a certain number of sacred things sustain relations of co-ordination or subordination with each other in such a way as to form a system having a certain unity, but which is not comprised within any other system of the same sort, the totality of these beliefs and their corresponding rites constitutes a religion (1961:56).

As such, the sentiments of the individuals which have been

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there was not a collective idea supporting "freedom of speech", these opponents would not be nearly so visible.

transferred into an external collective consciousness become attached to specific objects that have taken on a symbolic representation of these sentiments. As symbolic representations, the objects are declared sacred. The system of sacred objects and their interrelationship with each other, coupled with the shared collective sentiments embodied within them, in Durkheim's conceptualization form the basis of religion.

Typically our conceptions of religion embody the notion of a supreme being or beings that have the ability to grant us some form of immortality - whether that be similar in essence to the Christian idea of heaven, or whether it be a union of the individual consciousness with pure consciousness as in Tibetan Buddhism. According to Durkheim's definition of religion outlined above, however, no deity appears necessary.

Are extreme forms of nationalism then religions? If we trace nationalism through the formulation of religion posited by Durkheim, it seems quite conceivable that nationalism is a religion. There are a shared set of beliefs about the state which exist in the minds of the nation's individuals; the collective notion of nation is objectified in such devices as the national flag, the national anthem, geographical borders, etc.; the objects have attained a level of sacredness; and rites related to the nation have been firmly embedded into our culture, such as Canada Day on July first. Perhaps the term "nationalism", could just as easily be referred to as the "Nation Religion".

The notion of a "Nation Religion" (or "Civil Religion") is certainly not a new idea. It has been coined and discussed by such theorists as Rousseau, Lipset, and De Tocqueville, though the idea has its strongest voice in the work of Robert Bellah. Bellah (1970) argues that a "civil religion" is one of the defining characteristics of America (and equally, I would add, extends to all nation states). While backed by biblical archetypes - such as the Chosen People and the Promised Land - the civil religion "has its own prophets and its own martyrs, its own sacred events and sacred places, its own solemn rituals and symbols" (Bellah, 1970:186). It is a synthesis of religious principles and political ideologies. Its tenet is general enough that it encompasses all religious expressions of the good and the just, but remains specific enough that it hallows only a single nation.

But if a "worldview" is so specific that it "hallows only a single nation" it must define itself in comparison or contrast itself to other cultural worldviews - those with which it can symbiotically coexist, and those with which it must symbolically conquer.

FINDING A VICTIM: THE ROLE OF THE OUTSIDER

While Kearl and Rinaldi clearly provide an in-depth examination of the ways in which the nation state body dictates over the life-death struggle of its members, these authors do not capture the process by which the nation provides immortality power to its members. Instead we need to probe into the ideas of Becker, Lifton and Durkheim for a more complete understanding.

In order to accomplish heroic status or at least to maintain itself as a viable and "life-giving" cultural worldview, the nation needs someone or something unlike itself to oppose. In this way, when our nation is victorious (physically or symbolically) over "them", the fallibility of the "enemy" is not connected to our own. That is, the nation needs an enemy. But there is much more to the creation of scapegoats: it is a dramatization of the struggle over mortality. "Our nation" and its "allies" represent those who qualify for eternal survival; we are the "chosen people". "[And thus], the vicious sadism of war is not only a testing of God's favour to our side, it is also a proof that the enemy _is_ mortal: 'Look how we kill him'" (Becker, 1975:158).

Regardless of the motivational aspect - whether it is the nation's need to instill its members with the belief that it can serve them as a symbol of their own immortality or whether as part of a "purging" process - we must find a target to redeem ourselves from our fears. Becker calls this activity the "need to 'fetishize evil', to locate the threat to life in some special place where it can be placated and controlled" (1975:149). However, we so desperately reach toward godliness, so desperately need to ward off the threats to our life, that we often redirect the fear of death to very arbitrary targets. As Becker concludes, "men make fantasises about evil, see it in the wrong places, and destroy themselves and others by uselessly thrashing about" (1975:149).

According to Becker (1979) "victimization involves the creation of a death-tainted group (of victims) against which others (victimizers) can contrast their claim to immortality" (302). Why would a society need to create a death-tainted group? For Becker the answer rests upon man's need to transcend his mortality, to escape from the fear of death. He writes:

> The advantage of creating a scapegoat is that it allows the survivor group to avoid confronting its own death anxiety and death guilt, to find an absolute resolution to the struggle between internal and external blaming, and to move from victimized to victimizer (Becker, 1979:302-303).

Essentially, such external blaming accomplishes two aims: first, it alleviates the victimizer from the responsibility of the failures he ascribes to the victim, and second, it provides the victimizer with the sensation of power over life: he has killed but has not been killed, he has triumphed over death.

Lifton and Olson (1974) agree with Becker but would add that the need for victims becomes especially acute in periods of "psychohistorical dislocation" wherein the individual link with culture and history is severed or ambiguous. As a consequence, the individual's traditional methods of attaining immortality through connection to culture is also impaired. In an attempt to placate death anxiety, which without the protection of a cultural meaning system is unbearably intense, individuals respond to the dislocation with fervent "ideological totalism". That is, the tenets of culture are no longer perceived as guides for behaviour, but rather gain absolute authority as a description of reality (Lifton & Olson, 1974).

The consequence of ideological totalism, these authors argue, is the inability by individuals to accommodate unfamiliarity in others. Thus, those identical to oneself (in belief system, in geographical location, and in physical characteristics) form a clearly defined 'in-group' that is seen as sacred. Those persons who can be distinguished by any one of these qualities become unmistakably the 'outgroup' - the enemy. "And the enemy is he who must be destroyed - killed - if one's own group is to remain alive." (Lifton and Olson, 1970:101).

The victim-victimizer dialect, as represented by Becker and by Lifton and Olson, is often much more elusive than the above would suggest. Entire cultural class stratifications, such as are present in the Indian Caste system, provide much more subtle examples of one group's control over another as a means not only of removing themselves from the death-tainted group but also in defining differential access to the afterlife. Becker (1979) discusses this segmentation of society along immortality lines by his example of the Untouchable class in Hindu society which he claims are "denied immortality on all counts". Not only do the Untouchables not have access to the Vedic teachings which is imperative for securing the successful transportation of the soul from the corpse to "mukti" (a final release from the cyclical process of reincarnation) but because they are not allowed to associate with members of other castes, there is not even the possibility of the Untouchables achieving a "symbolic" form of immortality through association with the Other. This is just one example of how culture comes to incorporate immortality structures into itself.

At one point, religion had a stranglehold on the categorization of evil - casting it in terms of hell and fire and other such black imagery. In more recent times, however, the search for victims has been assumed by the political framework. Because the religious sphere is no longer in charge of immortality (at least not equal to its former free reign over it), the polity has had to assume the role. However, it has had many more challenges to its authority as benefactor of symbolic immortality than was true of religious frameworks. Why? Becker leaves this unaddressed. But I would speculate that the rationalization and secularization associated with the political realm as opposed to the "non-rationalization" and "sacredness" of the religious realm, has dialectically instilled an ethos of rational questioning on the part of the society's members.

Despite the uncertainty as to the reasons for the increased insecurity of the symbolic structure associated with the political sphere, the consequence has been much more certain. Since the polity is more vulnerable, it requires a more "constant flow of victims" through which it can express its symbolic death anxieties and by which it can restore the faith of its supporters (Becker 1979). Lifton and Olson (1974) suggest that the process of victimization is, however, a "cowardly path to immortality" because it is not that man achieves immortality by his contribution to the well-being of society and culture, but instead his immortality is bought at the price of the mortality of the Other.

This discussion has largely concentrated on the Other as someone outside of our national borders. But we are certainly not limited to such physical boundaries for our determination of the Other as evil. Much more prevalent, is the definition of the Other as evil within the cultural framework. In place of the term Other, we employ in its place the term "outsider" or "deviant".

A large volume of research exists on deviance in society, though most of it focuses on youth delinquency and such "immoral" but certainly not immortality threatening for the collective, behaviours such as drunkenness and drug abuse. The association of deviance at the more global level of victimization has been relatively unexplored.

If we examine the leading proponents' (specifically Cohen, Merton, Clinard and Erikson) definitions of deviance[19] we notice a general affinity between them. They share the idea that what constitutes deviance is socially constructed and not a physiological or psychological character of the individual. They do not, with the exception of Erikson, examine what role such definitions play, why society needs them, or what the consequence of such categorization of society's members can be.

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[19] Cohen defines deviance as "behaviour which violated institutionalized expectations - that is, expectations which are shared and recognized as legitimate within a social system" (1959:462). Similarly, Merton defines deviance as "conduct that departs significantly from the norms set for people in their social statuses ... Deviant behaviour cannot be described in the abstract but must be related to the norms that are socially defined as appropriate and morally binding for people occupying various statuses" (1961:723-724). These definitions also exemplify a similarity to Clinard and Erikson's definitions of deviance. For Clinard, deviance refers to "those situations in which behaviour is in a disapproved direction [from norms] and of sufficient degree to exceed the tolerance limit of the community ..." (1963:22). Finally, Erikson sees deviance as "conduct which is generally thought to require the attention of social control agencies - that is, conduct about which something should be done" (1964:10-11).

By contrast, Durkheim (1933) does outline what social constructions of deviance achieve for the society. In order to arrive at Durkheim's definition of deviance - or rather what in the Division of Labor in Society he would call crime that "offends the organ of common conscience" - we must first recall Durkheim's conceptualization of "collective conscience". Specifically he argues that the expanse of our individual beliefs and sentiments become symbolized in a disengaged collective or common conscience.[20] Any act, sentiment, or belief that contradicts or challenges the ideas integrated in the collective conscience are perceived by the members of that society, for which the collective conscience represents, as criminal. Such offense to our collective sensibility, especially if threatening to our symbolic order, requires revenge in order that the future does not seem vulnerable to similar offenses. But it is not only the vulnerability to future offense that motivates the defining of deviance and the restitutional assignment of punishment, rather it is deviance's disruption of social cohesion and its assault on the viability of the collective conscience that makes it most threatening (Durkheim, 1933).

Erikson also describes the role of the "deviant", and as we read his words we hear those belonging to Becker:

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[20] The process of disengagement was outlined in detail earlier in this chapter with regard to the sanctification of objects.

> As a trespasser against the group norms, the deviant represents those forces which lie outside the group's boundaries; he informs us, as it were, what evil looks like, what shapes the devil can assume. And in doing so, he shows us the difference between the inside of the group and the outside (1964:15).

Here Erikson not only outlines the role of the deviant but he also extends Durkheim's notion of deviance. For Erikson (1966), deviance is defined in terms of the collective conscience but the collective conscience, because it is really only the generalized voice of the individuals comprising a society, can redefine its moral boundaries to suit its needs and adapt to new challenges. The malleability of the collective conscience reverberates into a metamorphic character of what is labelled as deviance. The only shortcoming in Erikson's position, is that he fails to establish the motivational underpinnings of the need to define others as deviants as is so powerfully a part of Becker's theoretical position.

Durkheim comes closer to a motivational basis of deviance when he notes the potential future vulnerability if challenges are not met with punishment. But he does not take the next step and draw the connection of vulnerability of the collective conscience as a vulnerability of our immortality structures. At times he comes remarkably close to making this association as he mentions the word transcendence on several occasions. However, he immediately draws back and continues his discussion at a more mechanical and within-this-world level of analysis.

How does the above discussion aid us in our current undertaking? The answer, is that it clarifies the processes involved in the social construction of evil and identifies who will become the target of our hostilities. Furthermore, by understanding the fetishization of evil as a defense tactic against the knowledge of death, we are able to discern why subjects who experience mortality anxiety are motivated to increase their intolerance of cultural transgressors.

WHY DOES MAN SEEK IMMORTALITY?

While the past section has established the role and meaning of culture, I have yet to address why man would seek his immortality by identifying with culture, or even more basic yet, why does man seek immortality in the first place? The question is important for this thesis because in order to justify the empirical work I base my argument on the premise that the concept of death was frightening for the individual because it challenged one's belief in the immortality power of one's culture. If the processes that lead up to man's need for, and belief in, symbolic immortality are not fully understood the interpretations drawn from the empirical findings will appear nebulous and superficial. As a consequence, I ask that the reader permit a temporary departure from the general progression of this chapter so that I can briefly discuss man's driveness to immortality specifically as it is derived from the guilt and anxiety arising from being human.

In essence the "driveness to cosmic heroism" implies that man's awareness of his finitude, of his helplessness, of his insignificance, leads him to be especially motivated toward making himself rise above the limitations of the human condition and to somehow grab onto the cloak of immortality and wrap himself in its protection; to make a hero of himself (Becker, 1975)[21].

How does man become a hero to himself? According to Becker, the hero is the individual "who accrues power by his acts and placates invisible powers by his expiations. He kills those who threaten his group, [thus] incorporating [in himself] their powers". The hero "becomes a saviour through blood" (Becker, 1975:150).

But, as many of us are inclined to say, what about the heroes who play out their performances off the battle field; - the politicians, the athletes, the saviours of the poor and afflicted? The politician is perhaps the weakest example. We do not need to stretch our imagination too far to perceive a politician as a contemporary "visible" deity who, in the name of a particular ideology - i.e. democracy - manages to defeat evil (communism) by an enormous figure of slain enemies.

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[21] We must keep in mind that "the urge to immortality is not a simple reflex of the death anxiety but a reaching out by one's whole being toward life" (Becker, 1973:152). This "reaching-out toward life" is not limited to the earthly sphere, but rather is often directed away from the corporeal realm. According to Becker this may be one of the reasons why man has always granted its deities an asylum in the sky. And it may also explain man's utter fascination with outer space and the cosmological.

The athletes and the saviours of the poor and afflicted are more difficult to allocate into the field of heroism as defined above. Perhaps we should not be too literal in our interpretation. Certainly someone like Mother Theresa is not "killing" others. But can we not say that she is restoring our faith in the triumph over death? Her administrations of medicine to the ailing, her provision of food to the starving; these are clear demonstrations of how successful our immortality ideology (based in the belief of the omnipotence of the combination of science and humanitarianism) really is. For any slight reassurance that our immortality strategy is successful, we are grateful. Hence, we worship the success of the fusing of scientific technology and humanitarian ethics through the respect we transport to the personhood of an individual like Mother Theresa.

What about sports heroes? Are they slashing their opponents, lavishly spilling their blood onto the ground in order to replenish the vitality of the "home" team? It is highly unlikely that we could stretch the hero motif this far. Yet as we watch the football player running down the field, avoiding the tackles of his opponents, and stepping over the final white line to the excited elation of the crowd, we cannot help but feel that he has transcended the ordinary, that he has outlived the dangers of his mission and secured for himself a position of safety; that he has achieved a symbolic form of immortality. We too are trying to reach the safety zone, we too are striving to earn the reverence of others[22]. Essentially, we too are trying to transcend the earthly attributes that accompany our creatureliness.

The problem remaining for us, that the hero has managed to temporarily overcome, is that we are still face-to-face with the insignificance of our own lives because of its finiteness. One solution available to us, according to Becker, is to identify with the hero, thereby attaining at least a minimal amount of immortality power. However, in our eagerness to achieve a vicarious catharsis of our mortality anxiety, we often indiscriminately affix our veneration, and with it our power, onto any individual with heroic status (Becker, 1975). Such uncritical transference has provided political figures from the past and the present the justification to commit the atrocities committed under the title of war.

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[22] Achieving symbolic immortality vis a vis identification with a hero figure is powerfully portrayed in a novel by Frederick Exley titled A Fan's Notes. In this work Exley explores the sense of identity and meaning transported to the fan through his association with the hero. He also investigates the need for the identification and the potential repercussions on the fan if the "god-like" hero loses his stature as a deity.

What motivates man to such uncritical hero worship? For Becker, the answer lies in man's overwhelming guilt. But of what are we guilty? Becker replies:

> [Guilt] reflects the self-conscious animal's bafflement at having emerged from nature, at sticking out too much without knowing what for, at not being able to securely place himself in an eternal meaning system (1975:158)[23]

While Becker perceives guilt as arising from a "bafflement at having emerged from nature" (my emphasis), May conceives guilt as arising from an awareness of unfulfilled possibility or a denunciation (denial) of possibility. It is unfortunate that Becker does not connect guilt to denial of possibility as this concept plays such a prominent role elsewhere in his theory.

While the hero adopts a heroic solution to the transcendence of death, the average man attains immortality only through his identification with the hero - whether in the garbs of a single individual (a sportsman, a political leader, a religious figurehead) or under the guise of a collective body (the religious sect or the national culture). The average man has a collective solution to the transcendence of death.

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[23] Becker's phrase "having emerged from nature" is a direct referent to the definition of existence as revealed from its root form 'ex-sistere', which literally means to "stand out, to emerge" (May, 1983:50).

The Presence of Anxiety

The collective solution to the transcendence of death does not, however, remove the individual concern over personal death. There still remains a residual uncertainty with regard to the success and viability of our symbolic avenues to immortality. It is in this residual ambiguity that we find the location of anxiety. But anxiety is much more than an "affect among other affects" (May, 1983:109): anxiety is a catalyst for behavioral agency. In order to more clearly ascertain the nature and role of anxiety a brief review of the various ways in which anxiety has been conceptualized are presented.

Existential psychology has attained some clarity in the concept of anxiety since Rank's writing (in which anxiety and fear were taken as interchangeable terms), but the most significant contribution to attaining a precise definition arises from the work of Heidegger (1962). In fact, Heidegger identifies three categories of fear alone: "that in the face of what we fear (fearsomeness), fearing, [and] that about which we fear" (1962)[24]. In addition to the precision Heidegger achieves in this breakdown of fear, he also makes a very useful distinction between the various degrees and structure of anxiety. His terms for anxiety - alarm, dread and terror - are distinguished from each other by the proximity of the threat and the manner in which the threat is encountered (i.e. its suddenness)[25].

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[24] Of the first type - fearsomeness - Heidegger writes that this fear has threat as its primary type of involvement and is drawing close to us but is not yet within striking distance (1962). We do not really have consciousness about it - at least not consciousness as knowledge (remember both

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Becker and Lifton write that the knowledge of death is at best a "middle knowledge") - but we are able to sense death intuitively and imaginatively. The second view of fear - fearing - constitutes the action by which we allow that which we have characterized as threatening to concern us. It is bringing the fear into our consciousness. Finally, the third view of fear - that about which we fear - is the internalization of the threat at a conscious level which now transfers us from a state of fearing to an experience of being afraid.

[25] In situations when fear is transformed into alarm, the threat facing the individual "breaks in suddenly upon concernful being-in-the-world". This threat, however, does not have an immediate nature, but rather has the character of something to come - its delivery could be at any moment. Now if this threat which is coming, but which has not yet approached, has the character of being unfamiliar to the individual, then fear is remoulded from alarm to dread (Heidegger, 1962). More specifically, "dread is a sense of the loss of objects, of nothingness, which lays hold of me when I face, not this or that thing or person, but the whole structure of being-in-the-world itself (Encyclopaedia of Philosophy, vol. 3., 460).

If we recall Terror Management Theory's theoretical framework (and Becker's own works) we will remember that the term employed to describe the state of awareness about one's mortality is the "terror of death". I think Heidegger's classification of anxiety's ability to take the form of either alarm, dread or terror, forces us to be more precise in our terminology. With Heidegger's aid, Terror Management Theory should consider replacing their notion of "terror" with "dread" unless their experimental setting allows terror to be induced in the Heideggerian sense of the term.

Kierkegaard's conceptualization of dread is somewhat more general than Heidegger. Instead of the distinction between dread and terror outlined by Heidegger, Kierkegaard argues that "all immediacy, in spite of its illusory security and peace, is dread" (1989:55). He is in agreement with

In his most influential work, Will Therapy, (1936), Otto Rank suggests that anxiety should be granted ontological status[26]. That is, "the individual comes to the world with fear ... fear [that] exists independently of outside threats" (1936:172-173). This fear (anxiety) arises from the process of individuation, from the continual experience of separation (symbolic or actual) in the occurrence of self-development.

The ontological condition of anxiety, or "primal anxiety" as Rank calls it, oscillates continually between one of two forms - either life fear or death fear. Life fear, according to Rank, refers to the anxiety arising "at every new possibility of autonomous activity" (1936:175). The life fear performs a symbolic life-generating function. It occurs when the individual realizes the presence of the creative possibility and actualizes its potential not only in the concrete act but also in his "relationship with

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Heidegger, however, that one of the unique defining characteristics of dread is that it is "most in dread of nothing" (i.e. that its character is unfamiliar) (1989:55). Its "nothingness" is precisely what we dread. As Kierkegaard explains, if our dread was about something we would be alerted to its presence, but when our dread is of nothing, we have no mechanism by which to measure it. "Nothing" is not intended as "not anything", but rather it has no objective form in our reality of being-in-the-world.

[26] By the term "ontological character" existentialism implies that anxiety (and guilt) are components of the individual as he enters the world. Anxiety is not a facet of life that is learned or developed, but rather is an innate quality accompanying the defining features (especially the capacity of language and consciousness) of belonging to the human species.

others and in his integration with his own self" (Rank, 1936:175). The life fear, thus is the same anxiety that Lifton (1976) proposes as the anxiety that accompanies decentering on the route to a heightened state of centredness during the psycho-formative process. And it is also the same anxiety that underscores Kierkegaard's theoretical position.

At the polar end of the life fear is the death fear. This fear, Rank writes, is the "anxiety at going backward, in losing individuality" (1936:175). It is the anxiety that we experience when we are forced to sacrifice our autonomy, or which can strangle us when we realize our overall alienation from others and from our self. The key to successful and complete individuation is to maintain the two anxieties in balance and to actualize the creative possibilities that rests within one's self. Rank's dichotomization of anxiety into life and death fear excludes the possibility of a middle or balancing point, a "centredness" of self that is included in Lifton's conceptualization.

Lifton also emphasizes the active role of anxiety put forth by Rank. According to Lifton, anxiety is more than just the subjective state arising from threat or breakdown, rather anxiety involves a "struggle toward something; [it] involves motivation" (1979:128). The motivational element of anxiety is also present in Becker's framework. But while the motivational component in Lifton is aligned with self development, for Becker the anxiety motivates us to engage in such processes as the 'fetishization of evil' (the objectification of anxiety into the perception of the Other as evil). In addition to the motivational component of anxiety, Lifton (1979) suggests that a second adaptation to anxiety is also possible: inertia or impairment of symbolic processing.

In addition to the active component of anxiety identified by Rank, Becker and Lifton, in the work of May, anxiety takes on a very malleable character. May (1983) suggests that the particular form anxiety assumes, its character and content, is largely conditioned by the cultural context: that is, the values and goals that the individual deems essential to his existence are largely cultural products. May further contends that the quantity of anxiety the individual experiences is based on the degree of unity and stability in his culture[27]. This would return us to the distinction between anxiety at a cultural level and residual anxiety that motivates or obstructs individual agency.

I have digressed long enough to illustrate the process by which man comes to need culture and victims in order to arrest his fears of death. It is now time to turn to a consideration of why man continues to live out the denial of death drama and why he is not better equipped to understand the futility of his driveness toward immortality.

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[27] See the concluding chapter of this thesis for a discussion of the role of societal structures in the creation of anxiety and how future research may address the interrelationship between individual anxiety and culture by examining the degree of harmony and stability present in the larger societal framework.

THE OTHER AS INFORMANT

According to Heidegger (1962), death is the transition from Dasein (being in-the-world) to no-longer-dasein, from the kind of being that we call life, to the kind of no-longer-being that we call death. We claim to have knowledge of this "transition" by experiencing the being-coming-to-an-end of the Other, but Heidegger insists that detached or secondary experience is insufficient.

Instead of personally experiencing being-coming-to-an-end by our association with the Other, we really only experience a being-with the dead. Our experience of loss, is not the same experience of loss that the dying person feels as his biological faculties slowly escape him. We have no way of accessing the loss-of-being the Other is encountering, we have only the loss such that the individual's contribution to our being will no longer be present. Lifton echoes Heidegger's position here of the unattainability of the death experience of the other. In Life of the Self, Lifton writes that the "imagination of death still involves the individual as spectator. We can never really imagine our own death in a realistic form" (1976:30).

If we heed the position taken by Heidegger, we can conclude that in our project to inform ourselves about the totality of self or the ends toward which our being is directed, we cannot employ our experience with the death of the Other as a guide or as an informant for our own experience. Thus, death remains for every individual an entity of the 'unfamiliar' (the defining characteristic of anxiety).

A second reason why anxiety has such an unfamiliar character is because of our interpersonal arrangements and the consequent societal structure that surrounds us. Our appeals to the "they" for our understanding of anxiety only isolates us further from our own enlightenment. Heidegger writes:

> The "they" concerns itself with transforming this anxiety into fear in the face of an oncoming event. In addition, the anxiety which has been made ambiguous as fear, is passed off as a weakness with which no self-assured Dasein may have any acquaintance. What is 'fitting' according to the unuttered decree of the 'they' is indifferent tranquillity as to the 'fact' that one dies. ... And it hides this fact from itself by recoining 'death' as just a 'case of death' in Others - an everyday occurrence which, if need be, gives us the assurance still more plainly that 'oneself' is still living (1962:298).

Thus, the collective interpretation of death to which we identify only further separates us from our own true being, from our potential for a 'freedom toward death' - "a freedom which [would] release us from the illusions of the they" - that would enable us to see our human project more clearly: a project not to escape our death, but rather a goal to fully achieve a wholeness of being at death.

The emphasis to this point has clearly been on the anxiety arising from the knowledge of our death, but perhaps the case has not yet been made loudly enough for the very unique element of death itself. I do not wish to belabour the lack of resolution of man's position with his mortality, nor do I wish to explore the imaginative conceptions of death that have existed historically, rather I have chosen to let Lifton, in his three premises about the nature of death, outline the centrality and uniqueness of death for life.

> (1) Death is anticipated as a severance of the sense of 'connection' - or the inner sense of organic relationship to the various elements and particularly to the people and groups of people, most necessary to our feeling of continuity and relatedness;
>
> (2) Death is a test of the meaning of life, or symbolic integrity - the cohesion and significance - of the life one has been living; and,
>
> (3) Death, in the very abruptness of its capacity to terminate life, becomes a test of life's sense of movement, of development and change - of sequence - in the continuous dialectic between fixed identity on the one hand and individuation on the other (Lifton, 1979:254-255).

The first proposition links the self to society. The second, presents death as the prime element in the search for the meaning of the self. The third, views death as the catalyst which fuels the dialectic between individuation and fixed identity. Death is thus the agent that brings movement into our life and which germinates our creative potential for the growth of the self.

The philosophical position on the role of the Other as interpreter of individual death and yet not as informant of death itself is a very important issue for this thesis. On the one hand subjects are asked to attempt to personalize the death process and imagine their own mortality and yet on the other hand personal knowledge about death, as we have just seen, is really only the understanding we have by our appeals to the collective interpretation of death and our role as spectator in witnessing the death of the Other. As a consequence the individual cannot typically rid himself of the unfamiliarity of death. Therefore, it could be argued that the emphasis on the personal aspect of death in the experimental manipulation is misplaced. However, there is some support that personalization is important. If individuals believe in the collective definition of the death experience or reflect the "they's" fears and apprehensions, insight into the degree to which individuals identify with the cultural interpretations of life and death in order to make sense of their creatureliness and in their self definition may be gleaned. That is, it may be possible to witness first hand the use of culture as an anxiety-buffering device. Additionally, the emphasis on personalization cuts off the displacement strategy of speaking disinterestedly about the death of the Other, as though one's own self was immune from the biological processes of decay and disintegration. These arguments would suggest that an emphasis on the personalization of death in the experimental manipulation is not contrary to the theoretically espoused inability of the self to understand his own death, but rather forces the individual to report his understanding of death, as informed by the Other but without being able to disassociate himself from the death process.

CHAPTER SUMMARY

As the central theoretical positions pertaining to the study of immortality and self relation to Others and self were reviewed, it was necessary to probe into the seemingly distinct fields of psychological existentialism, social psychology, philosophy and sociology. The examination has revealed, far from these disciplines' distinctiveness, a remarkable compatibility among the ideas expressed.

Perhaps one of the most notable feature rests in the interdisciplinary agreement on the ontological nature of anxiety. More important than agreeing to this ontological status, however, is the theorists recognition of the significant role anxiety plays in individuation, self-development and self-awareness. The potentially creative energy of anxiety - be it in terms of Rank's life fear at moments of individuation, or in the psycho-formative process of decentering en route to a higher state of centredness as proposed by Lifton - also receives attention from the theorists.

The combination of ontological anxiety and guilt is what undercuts our need to be immortalized, or as Becker would say, to achieve cosmic heroism. Our driveness toward heroism - to be Gods - obscures the means by which we attain it. Forgotten are the masses of individuals whose lives we made meaningless, forgotten are those who did not survive our ruthlessness. We have no remorse; they were the enemy! What was their crime? Merely that they held some belief that was contrary to our own or that their physical features did not match our own. The values that define our existence as individuals were threatened by them so we are justified in shedding their blood. Or are we?

A review of the theoretical ideas of Rank, May, Becker, Lifton and in some instances of Fromm, has also illuminated the joint attention by these theorists to the position of meaning. Becker and Lifton's work grants meaning one of the most prominent positions within their frameworks. In some respects, man's yearning for meaning motivates all of his efforts to gain immortality. While man would probably not be content with physical immortality, he unquestionably would not be content without his symbolic immortalization vis-a-vis his material contributions.

The consideration of existential philosophy has been imperative for the aims of this thesis. Not only have the basic underlying premises of Terror Management Theory been illuminated - such as the indirect reference to the conception that man's possibility (freedom of choice) enables him to define the symbolic structure within which he acts and to impose order and meaning on his temporally constrained existence - but also we see the richness of the vast theoretical field from which Terror Management Theory derives its specific position. The boundaries defining Terror Management Theory will probably be quite elastic until it more directly links itself to the theoretical tradition of existential philosophy.

In addition to these more elusive benefits of including a consideration of philosophical existentialism, there also exist some very tangible and immediately constructive improvements to be included in Terror Management Theory. First, and perhaps most importantly, the clarification in the usage of the terms fear, dread, anxiety and terror introduced by Heidegger will prove vital for determining the nuances of the transference process between mortality awareness and human agency. A second useful import from existential philosophy resides in the notion of the unfamiliarity of the death concept.

All theoretical realms position the Other as a key figure in the understanding of self. By making reference to the Other we gain insight into our own mortality. Our reference to the Other allows us to formulate the values and goals which we define as essential to our psychological existence. By our association with the Other we find the courage to challenge our fears of the future. However, we also use the Other to defer personal responsibility and to shield us from our own fears. We do so by defining ourselves in contrast to "them", by conceptualizing them as inferior or less worthy of immortality power than ourselves. We kill them so that we ourselves can live!

In all disciplines we witnessed an emphasis on the imperative of balance among the elements of self, be these elements expressed in terms of bipolar continuums as postulated by Kierkegaard, Lifton and Rank, or in terms of an awareness of the processes of freedom, possibility and infinitude as illustrated by Fromm, Heidegger and Becker.

Finally, it was noted that the four areas of intellectual thought arrive at very similar conclusions. Man must confront the reality of his position as 'beast' and must not seek his asylum in the realm of angels if he is to truly live. Instead he must employ his knowledge of his finitude in order to live a fulfilled and creative life. The theorists also agree that at present we are in the midst of a transformation between symbolic systems. Man is disillusioned with the inadequacy of the structure founded on religious morality and inaccessible deities. He has consoled himself with a structure defined by rational, economic principles and represented by worldly figures and institutions. But the theoreticians and philosophers alike do not acknowledge the permanence of this transferral of faith, nor do they feel the move has enlightened the individuals who adopted it. Rather, because man feels he has escaped the illusions of an irrational symbolic structure, he is not even cognizant of the fact that he has adopted a new structure in its place. In some respects, man is now doubly alienated - alienated from his meaning system, and alienated from potential self-awareness.

EMPIRICAL APPLICATION

To date, Terror Management Theory has provided convincing evidence that awareness of one's mortality motivates subjects to be intolerant of cultural deviants and to be benevolent toward cultural upholders. Support has been found in a variety of experimental settings including the study of behavior toward prostitutes (Rosenblatt et al, 1989), attitudinally similar and dissimilar others (Greenberg et al, 1990), and individuals espousing ideologies directly contrary to the national ideology (Pyszczynski et al, 1989). Researchers have also concluded that mortality salience[28] motivates subjects to increase reward for an informant in the apprehension of a violent criminal (Rosenblatt et al, 1989) and to increase liking and agreement with ideas expressed by someone who directly affirms the tenets of the nation state (Pyszczynski, 1989). In all experiments except one, researchers operationalized mortality salience by asking subjects to respond to two open-ended questions: (1) Describe what you think will happen to you as you physically die; and, (2) Describe the emotions that the thought of your own death arouses in you (Rosenblatt, 1989)[29]. In the exceptional experiment, the open-ended questions are replaced with an 18-item likert-type scale known as the Boyar Fear of Death Scale. The researchers include this latter measure of mortality salience to test whether other mortality salience instruments elicit similar behavioral effects as the open-ended mortality salience instrument.

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[28] "Mortality salience" can be defined as the raising into consciousness the knowledge of one's own mortality. While death's possibility is always present, we employ a process of objectification that removes the immediacy and personalization of death into the sphere of a general and universal occurrence that occurs to everyone (Kierkegaard, 1989). This objectification and generalization removes the urgency from decision making and action and, thus, contents man to remain in a state of noncomitment and inaction with respect to death. However, when death is perceived subjectively (as occurs when required to write about one's own personal death), then every decision has ultimate connections to and consequences for future action and the self must make these choices with the utmost seriousness as their decision leads ultimately to define the uncertainty of the future (Magill, 1982).

Of lesser significance for the experimental aspect of this thesis, but of substantial import for the conceptual position is the finding by Greenberg et al (1990) that mortality salience invoked increased liking for similar others and increased disliking for dissimilar others only when the similar other was presented to the subject prior to the presentation of the dissimilar other (005). This finding would suggest that heightened or diminished attraction occurs only when an explicit comparison of two individuals or categories can be conducted by the subject.

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[29] The two open-ended questions are referred to as the Mortality Attitudes Personality Survey (MAPS).

And thus, we are exposed to an extremely important feature of cultural worldviews. Symbolic belief structures are not tangible entities or permanent constructions continually present at a conscious level in the minds of a society's members. Rather they are highly elusive informal collective notions that are often only vaguely defined in our subconscious. Contradictory or disparate beliefs to the pervasive worldview of any society are not equally threatening nor do they pose a unanimous threat to all members[30]. As a consequence those elements of the cultural worldview that are only marginally perceived as threats to one's immortality structure may require some heightening before they pose a sufficient threat.

Despite the somewhat considerable support generated for Terror Management Theory to date, the researchers are unable to establish mortality anxiety as the intervening variable by which the mortality salience manipulation produces the observed effect of increased punitive and/or benevolent behaviour. That is, they find no evidence indicating that mortality anxiety operates as the mechanism causing the behavioral change elicited. In six of the experiments, the Multiple Affect Adjective Check List (MAACL) (positioned directly after the mortality salience manipulation) tested for "positive affect, hostility, depression, and anxiety". The fact that one of the subscales measured conscious anxiety is particularly important. It would be expected that some evidence of anxiety would be present if "mortality anxiety" acted as the mechanism for behavioral change. However, the researchers found no evidence of conscious anxiety in any of the experimental conditions.

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[30] The diversity of challenges to the cultural worldview perceived as threatening may in large part be due to the general level of self-esteem of the individual involved. Extensive research has been conducted within the field of psychology establishing the pivotal role self-esteem plays in behavior particularly as a motivational impetus. Greenberg et al have devoted most of their theoretical developments in Terror Management Theory to the potential role of self-esteem in the successful deployment of incoming threats to one's immortality structure. Two articles by Solomon, Greenberg and Pyszczynski, specifically consider this topic: "The Critical Role of Self-esteem in Adaptation: A Terror Management Analysis" and "A Terror Management Theory of Self-Esteem and Its Role in Social Behavior".

Based on the lack of support for the conscious evidence of anxiety, Rosenblatt et al (1989) tested several alternative mechanisms such as mood and self-awareness. But neither finds support. Perhaps, the researchers argue, anxiety arising from the salience of personal mortality is so quickly dispersed from consciousness that overt measures of anxiety are unable to capture its fleeting presence. With this possibility in mind, the researchers then explored for physiological evidences of anxiety as measured by such instruments as galvanic skin response, pulse volume and pulse rate. Again, however, they found no support for the presence of anxiety.

Left in the position that neither conscious death anxiety nor physiological indications of death anxiety has been in evidence the researchers conclude that the threat to one's achievement of symbolic immortality must then be repressed. One reason for the reliance on a repression explanation is the vast treatment it has received in the theoretical psychological literature, including occupying a fairly prominent position in Becker's denial of death framework.

According to Becker, repression, also known by Rank (1936) as "partialization", acts as a "normal self-protection and creative self-restriction". It can be understood as a "narrowing down of the world, shutting off experience, developing an obliviousness both to the terrors of the world and to ones own anxieties" (Becker, 1973:178). Unrepression, Becker argues, is impossible. Man would be placed face-to-face with his creatureliness: he would become frozen in terror at the absurdity of his existence, at his inability to control his animalness and therefore at his helplessness in the world. "Repression is not falsification of the world, it is 'truth' - the only truth that man can know" (Becker, 1973:265). In this perspective then, repression occupies an essential role in protecting man against the infinitude of possibility that lies before him. Philip Rieff (1970) agrees with Becker's argument for repression. He argues that repression enables us to support the heaviness of our anxieties.

> The heaviest crosses are internal and men make them so that, thus skeletally supported, they can bear the burden of their flesh. Under the sign of this inner cross, a certain distance is achieved from the desire to be and have everything (Reiff, 1970:41).

Zilboorg (1943) holds a similar position. He argues that the repression of the fear of death maintains man's control over his creatureliness. Specifically, repression requires that the individual act as watch guard over the repressed material making certain that it does not attempt to escape from its subconscious home and resurface into consciousness where it can once again penetrate the cloak that covers the knowledge of mortality.

The identification by Zilboorg of the concerted effort needed by man to maintain the repression of threatening material recalls Freud's conception of the "return of the repressed" (1911). Freud warned that suppressed material can return to consciousness, either in an original or disguised form. The reappearance of material in a disguised form poses a problem because we are forced to thoroughly investigate the disguise and discover the rudimentary material originally repressed. "Disguised" repression, most often associated with what Freud termed "primal repression", involves a "denial of entry into consciousness of threatening material" (Holmes, 1974:633). This means that threatening material must be immediately relegated to the unconscious without ever presenting itself to the conscious.

A second form of repression identified by Freud, called "repression proper", consists of the assignment of the threatening material to the unconscious only after it has first been processed and recognized at a conscious level.

Solomon, Greenberg & Pyszczynski (1989 -in press) also argue for the viability of a repression explanation. They argue specifically that our continual identification with and reaffirmation of our cultural worldview is in fact a repression strategy to allay fears of our own finitude. As such it is not that we consciously suppress threatening material as Freud's primal repression concept would require, but rather that our identification with culture is an active subconscious displacement strategy that removes the threat of vulnerability "by absorbing oneself in the cultural drama" (Solomon et al, 1989 - in press).

Despite the theoretical arguments for the viability of the repression explanation, the lack of physiological evidence of anxiety immediately prior to, or during the repression process leaves us sceptical of its presence in Terror Management Theory research. However, other empirical projects have also posed a repression interpretation of their findings, a few of which deserve consideration here.

Feifel and Branscomb (1973) have investigated demographic variations and fear of death, focusing on a distinction between fear of one's own death and fear arising directly from the death of others[31]. They identify three levels at which fear of death is believed to operate: at the conscious level, at the fantasy level, and below the level of awareness.

To arouse fear of death at the level of consciousness individuals were asked to respond to the question, "Are you afraid of your own death? Why?". To evoke fear of death at the fantasy level subjects were asked to answer the question, "What ideas or pictures come to your mind when you think about your own death?". In the final category - fear of death below the level of awareness - differential recall and reaction times on a word association test consisting of ten death-related nouns and ten innocuous nouns were employed as measures of subconscious fear of death.[32]

At the level of conscious fear of death, results show that only age (younger individuals report that they are more afraid of death than older individuals) and religious self-rating are significantly related to fear of death. For the fantasy level of fear of death, only religious self rating was significantly associated with fear of death: that is, subjects who reported positive imagery to the fear of death question were significantly more religious than those who responded with either ambivalent or negative imagery. Finally, at the subconscious level of fear of death the researchers found that differential recall and response time was significantly slower for the death-related nouns than for the innocuous control nouns. At this subconscious level of fear of death there was also evidence of an interaction between age and reaction time: older individuals were slower to respond to the death-related words than younger subjects. Perhaps the proximity of death as perceived by the older respondents intensifies their fear of death. It is interesting that this finding reverses the age effect at the level of conscious fear of death.

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[31] In lieu of the discussion presented in the conceptual chapter as to the unfamiliarity of death as derived from experiencing the death of the Other, this distinction is extremely important.

[32] Employing word association techniques as an indicator of subconscious repression has been seriously questioned by an exhaustive study conducted by David Holmes on repression related experimental research.

One finding in Feifel and Branscomb's (1973) work that is only drawn out in their discussion of the overall results is the observation that the emotional reaction to death differs depending on the level of awareness. Specifically they found that the conscious response to death is characterized by "repudiation"; the response to death at the fantasy or imagery level, on the other hand, is that of "ambivalence". By contrast, they state that the emotional response to death at a subconscious level is one of "outright negativity". This latter description is somewhat misleading, however, because an inability to recall death-related nouns does not supply sufficient evidence of negativity operating as an emotional category. Perhaps a more persuasive argument, if we heed Lifton's discussion of adaptive strategies to the onset of anxiety, would be to conclude that the death-related nouns impair symbolic or cognitive functioning. Therefore, a term such as aversion, which the authors themselves use to describe the results elsewhere in their paper, would be more appropriate as a description of the emotional response to subconscious awareness of mortality.

Nonetheless the evidence of the activity of subconscious fear of death is a pivotal finding for Terror Management Theory researchers. As we have seen, Terror Management Theory researchers rely on a "repression" explanation when they are unable to detect conscious or physiological evidence of anxiety.

Other researchers have also investigated the relationship between repression tendencies and death anxiety. For example, Tolor and Reznikoff (1967) examined death anxiety in the context of individual tendencies of repression versus sensitization and also in relation to perceptions of internal and external control of reinforcement. These researchers hypothesize that "subjects who sensitize [will] experience more overt death anxiety than those who repress", and that "subjects who believe in external controls [will] have more overt death anxiety than those who feel less subject to environmental forces" (Tolor & Reznikoff, 1967:427).

Results support both hypotheses. Subjects who respond to threatening stimuli by sensitization processes (including such means of adaptation as alertness, intellectualizing and obsessional behaviours) experienced more overt death anxiety than those individuals who employ repressive mechanisms (such as avoidance and denial) in the face of threat ($r=.586$ with $p<.001$). Additionally, subjects who believed in external control of events and reinforcements experienced more overt death anxiety than those subjects who perceived themselves as capable of influencing environmental (not in the sense of natural) events and reinforcements ($r=.316$ $p<.01$).

Despite the strength of the correlations between death anxiety and repression/sensitization processes, it is important to note that these are only correlational indications of association. They are not placed in the context of an experimental design or within the framework of a causal model and so it is difficult to decipher whether the interrelationship between the two factors are unidirectional or reciprocal in structure. Surprisingly, Tolor and Reznikoff identify the typical strategy employed by individuals first and then measure level of overt death anxiety. It may have been more revealing if the order of variables had been reversed so that we would be informed as to what process is elicited by the knowledge of one's own mortality. Another shortcoming of Tolor and Reznikoff's study is that they measure only overt death anxiety. A repression strategy to death anxiety would require a measure of subconscious anxiety in order to detect whether repressive mechanisms are in fact being elicited.

Berman and Hays (1973), however, were unable to replicate the results reported by Tolor and Reznikoff (1967). They found that when they employed an alternative death anxiety measure - the Templer Death Scale - no correlational evidence between locus of control and death anxiety existed. At first glance the failure of replication would call into question Tolor and Reznikoff's findings. However, Berman and Hays do not pose an alternative explanation for the strong findings by Tolor and Reznikoff, nor do they explore the relationship between repressive and sensitization mechanisms and overt death anxiety which is the stronger of Tolor and Reznikoff's findings.

While there has been some empirical evidence generated for repression by Feifel and Branscomb (1973) and Tolor and Reznikoff (1967), and while Terror Management Theory employs a repression explanation for their findings of no conscious or physical arousal of anxiety, David Holmes concludes, after an extensive review of repression experiments, that "in view of the amount and inconsistency of the data accumulated to this point, and pending new data supporting the concept of repression, the continued use of repression as an explanation for behavior does not seem justifiable"

(1974:651, my emphasis).

Perhaps part of the reason for the overall lack of support for the repression hypothesis resides in the fact that most experimentation employs cognitive manipulations and measures for the assessment of repressive processes which may not be sufficiently related to threatening material. Rarely has there been experimentation conducted which looks at the absorption of threatening material (other than negative affect word associations) and how the individual contrives mechanisms to dissolve the threat. Since Holmes' extensive review of repression experiments in 1974, more recent studies investigating motivated forgetting of emotionally significant events (particularly David 1987; and Hansen & Hansen 1988) have found evidence of active suppression of the emotional memories especially if the events are death-related. While further research in the area of repression is needed, we must be extremely careful not to use it as a "catch-all basket" for unexplained findings.

A second shortcoming of the experimental research conducted from within a Terror Management Theory perspective also needs to be examined. Of particular concern is the researchers' assumption that the anxiety arising from the knowledge of one's own mortality is a unique entity capable of eliciting a behavioral response. There is, however, no validation of this assumption. Theoretically, Terror

Management Theory may be justified by this omission. Becker (1975), in the tradition of Freud, has argued that one adaptive strategy to the onset of anxiety arising from the knowledge of death is to channel it into more manageable forms. Therefore, evidence of anxiety apparently attributed to traumatic events, such as divorce, is really an existential anxiety because subconsciously the prospect of divorce is interpreted as a severing of one's connectedness to the family circle. And, if we recall from a Liftonian perspective, severing of connection - or separation - is a symbolic equivalent to death. If the theoretical framework holds, both forms of anxiety would be able to motivate behavioral agency, but the "hidden" death anxiety (that associated with divorce) would not achieve the same levels of anxiety, because the directness of the assault to one's vulnerability is more complex and less obvious to the individual.

Since Terror Management Theory has access to a theoretical position that would support anxiety from mortality salience and proxy sources inducing behavioral agency, the researchers are possibly justified in the failure to test a source of anxiety other than mortality salience. However, as all theoretical assumptions should be empirically tested, this thesis tests exam failure anxiety as an alternative source of anxiety. In fact, it is proposed that the complexity of the non-death form of anxiety is precisely the reason why it is incapable of eliciting behavioral change. That is, the cultural framework with which we identify is so interwoven in less-obvious representations of existential issues, that when the non-death stimulus is raised into the subject's consciousness, the connection to more general existential concerns will not be concluded and thus, while Becker may be correct that existential anxiety often presents itself in disguised form, subjects will not discern the "disguised" existential form of anxiety.

RESEARCH DESIGN AND METHODOLOGICAL ISSUES

THE EXPERIMENTAL SETTING:

The design of this experiment replicates and extends the prostitution experiments conducted by Rosenblatt et al (1989). Table 1 provides a schematic outline of the set of experimental conditions (twelve in total).

As Table 1 demonstrates the twelve conditions are differentiated by three factors: the type of anxiety aroused, the placement of the Cognitive Test in relation to the dependent variables, and the positioning of the Templer Death Scale in relation to the dependent variable.

Table 1: Experimental Design

#	Anxiety Condition	Position Of Scales Vis-a-Vis the Dependent Variables	
		Cognitive Test	Templer Scale
1	Mortality	Before	Before
2	Mortality	After	Before
3	Mortality	Before	After
4	Mortality	After	After
5	Exam Failure	Before	Before
6	Exam Failure	After	Before
7	Exam Failure	Before	After
8	Exam Failure	After	After
9	Control	Before	Before
10	Control	After	Before
11	Control	Before	After
12	Control	After	After

In terms of the first means of differentiation - type of anxiety aroused - three forms are employed: mortality anxiety (conditions 1 through 4), exam-failure anxiety (conditions 5 through 8) and no anxiety (conditions 9 through 12). Anxiety is aroused by three open-ended questions which ask subjects to write about the knowledge of the object of anxiety - mortality or exam-failure. In the case of the no anxiety set of conditions, an innocuous control subject (favourite vacation spot) is used instead.[33]

Each of these three types of experimental conditions are further subdivided. Within group distinctions are the consequence of the differential placement of the Cognitive Test and the Templer Death Scale with respect to the dependent variables. In conditions 1, 3, 5, 7, 9, and 11, a test of cognitive ability (the Cognitive Test) follows the open-ended experimental manipulation and precedes the measures of the dependent variables. In the remaining conditions the Cognitive Test appears toward the end of the questionnaire (after the measures of the dependent variable). In conditions 1, 2, 5, 6, 9, and 10, we place the Templer Death Scale is placed after the open-ended experimental manipulations but before the measures of the dependent variables. In those conditions where the Templer Death Scale and the Cognitive Test precede the dependent variables (conditions 1, 5, and 9), the Templer Death Scale follows the Cognitive Test.

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[33] The specific wording of these questions is presented under the section on Instrument Construction later in this chapter.

EXPERIMENTAL DESIGN: ASSUMPTIONS AND ISSUES

The importance of the experimental design for my thesis rests in the assumptions which underlie its use. Of most value, the experimental setting allows the researcher to conclude, subject to the laws of chance, that the independent variable acts as the causal variable in the relationship between the independent variable and the dependent variable. That is, any questions arising with regard to the temporal assumptions prescribed by the researcher with respect to the independent and dependent variable can be eliminated.

A second feature of the experimental design is that both known and unknown characteristics of subjects are randomly distributed across experimental conditions (subject to the laws of chance). This feature eliminates the possibility of other variables confounding the relationship between the independent and dependent variables (i.e. the experimental design avoids the possibility of spurious relationships)[34]. The ability of the experimental setting to eliminate confounding variables does not detract from its ability to examine a large number of potential causes of the dependent variable.

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[34] The discussion of the experimental design has already made sufficient argument against the possibility of a spurious effect (confounding variable) in the experimental setting, though it is worth noting that it has been argued elsewhere that only spurious relationship involving "property" variables (confounding variables that accompany the individual - i.e. demographic characteristics or attitudinal positions)

A number of variables (presumed to be causes of the dependent variable) are included in the current research. Consistent with the literature on experimental designs, these other variables will be referred to as "covariates". The addition of covariates into the experimental design has three benefits. First, they increase the power of the statistical test by reducing the standard error of the estimate. Second, they enable us to see whether they operate as intervening variables that mediate between the experimental manipulation and the dependent variable. Third, covariates may be involved in interaction patterns with the primary manipulation which will increase the precision of the relationship being defined. That is, they can condition the effect of the experimental manipulation. As such, they are extremely useful to the researcher because they identify the specific conditions under which the experimental manipulation (or some other covariate) affects

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have been restricted. "Forcing" variables (those confounding variables that occur in the midst of the experimental process such as experimenter effects and uncontrolled environmental influences), however, are still able to perform the function of creating a spurious relationship among explanatory and dependent variables. Since the experimenter was the same for all conditions and no interruptions during the experimental setting were noticed, it is unlikely that forcing variables are operating in the present research project.

human behaviour.

Covariates can, however, also complicate an understanding of the 'causal' process because extreme instances of specificity are at the expense of generalizability. But the trade-off between specificity and generalizability occurs in our predictive powers and should not be interpreted as obscuring the causal process.[35]

While there is considerable advantage to employing the experimental model as a research methodology, it is not without its limitations. One of the most common critiques of the experimental approach is that the behavioral environment is artificial and therefore the generalizability of results from the experimental setting can be quite difficult. The issue is not whether the results from a specific experiment can be generalized to another population, but whether or not the constructs being measured and the theoretical position being supported is robust enough to be transported into other contexts.

A second disadvantage of the experimental research setting is the problem of achieving construct validity for the experimental manipulation. The Templer Death Scale is employed in addition to the open-ended manipulation to verify the construct validity of the mortality salience independent manipulation. That is, the artificial construction of manipulations in the experimental setting may inadequately capture the realism and breadth of the subject being examined. The exam-failure anxiety manipulation, however, does achieve a fair degree of realism because the questions selected for the cognitive test were purposely chosen so that subjects would directly experience exam-failure anxiety, especially since a time restriction was placed for their completion (15 minutes).

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[35] The issue of generalizability is a complex one and we need to distinguish between the generalizability of the manifest findings and generalizability of the conceptual framework. While the former allows for replication and garners support for the conceptual field, the issue of conceptual generalizability is much more important. The aim of experimental research should be to find support for the theoretical concepts and to refine them and increase their precision. Stinchcombe (1968) offers a very lucid discussion of these issues.

THE GENERAL METHODOLOGICAL APPROACH

Two exploratory techniques are used to investigate the data. First, the measures of the constructs are examined to see if a unidimensional scale can be constructed. Second, the system of item relationships are investigated. In order to identify a scale the elements must display evidence of three types of validity - convergent validity, construct validity, and discriminant validity. Convergent validity requires that items exhibit evidence of association with each other; that is they must report relatively moderate correlations (in the vicinity of .3). High item-item correlations indicate that items operating as a scale provide a reliable measure of the latent construct.

Construct validity, by contrast, requires that items behave in a similar fashion. If the construct correlates with another variable than the items measuring the construct should also correlate with that other variable. Compatible behaviour can also be identified by the agreement evident between theoretical behaviour and empirical behaviour. Evidence of agreement between the theoretical and the empirical is a sign of discriminant validity. If a construct does not correlate with another variable theoretically, empirical indication of a relationship between the construct and the other variable should not be found.

At times the investigation of variables to be included into a scale reveals that the series of items being considered represent more than one concept. Factor Analysis of the items is conducted in order to detect multiple concepts among items. If more than one factor is identified by the procedure, the solution is rotated to simple structure and the communality of loadings is used as an indication of relation. Generally speaking, these loadings should report values of communality greater than $|.40|$ for inclusion in a particular factor.

With the exception of the creation of the cognitive test scale, all exploratory investigations of unidimensionality among items employed this factor analysis procedure. The items considered for the cognitive test scale posed a unique problem in that (a) the items are dichotomous, and (b) the items varied in their level of difficulty. Traditional factor analysis methods, like that described above, are unable to identify varying levels of difficulty in dichotomous items. Instead, the variance in difficulty is compensated by the indication of multiple factors.

One potential solution to the problem of vicarious difficulty factors is to employ a Guttman scaling technique in place of traditional factor analysis. While the Guttman technique accommodates for varying levels of difficulty among items, it does not allow measurement error. One final alternative to traditional factor analysis procedure (and a technique used in this thesis) is the Mokken analysis. This stochastic extension of the Guttman Scale does allow measurement error (Gillespie, Tenvergert & Kingma, 1987).

An exploratory approach to data analysis was also employed at the level of statistical and methodological procedures. The primary tools used in this project are analysis of variance and multiple regression. On occasion these procedures are supplemented by analysis of covariance. Analysis of variance allows differences in the conditional means for all variables acting as endogenous variables[36] in the causal model to be examined. Multiple regression enables the isolation of interaction patterns among covariates and permits the researcher to calculate the average change elicited in the dependent variable (intolerance toward others' rights to basic civil liberties) as a consequence of the specific predictors (covariates and experimental manipulations). In addition, multiple regression allows us to include the effects of quadratic relationships present among the independent variables. Analysis of covariance helps the researcher identify interaction patterns among independent variables.

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[36] Endogenous refers to those variables that are in part determined by a prior causal variable. The Templer Death Scale and the Cognitive test can be interpreted as an endogenous variable in those conditions where they are positioned between the open-ended experimental manipulation

The following steps depict the approach taken for the determination of unique experimental manipulation effects. First, an analysis of variance of the conditional means for the experimental conditions on each of the variables that potentially functioned as endogenous variables is conducted. Second, if a single experimental condition reports a significantly higher or lower conditional mean, it is further investigated by conducting a t-test of means contrasting the unique condition with the remaining conditions. Third, if the isolated experimental condition behaves differently from the other conditions (i.e. the t-test supports the earlier finding of difference), then a

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and the intolerance dependent variable (civil liberty items).

dummy[37] variable for that experimental condition is constructed and introduced into a "working" regression equation. Fourth, if the variable introduced into the regression equation exhibits no evidence of relation with the dependent variable (i.e. has no significant direct effect on the dependent variable as measured by the t-test of slopes), it is removed from the regression equation.

In order to determine the effect of covariates on the dependent variables (either acting singly or in combination), a series of exploratory statistical procedures are used. To begin, the correlation between each covariate and the dependent variable is computed. If the correlations is found to be sufficiently strong, an analysis of covariance is conducted. If results from analysis of covariance indicate the presence of conditioning behaviour (i.e. the t-test of equal mean slopes is significant at the .05 level), a new variable is created for the interaction relationship. Then, the newly created interaction term and its component parts are then introduced into the working regression equation. Finally, if the t-test of slopes is statistically significant for the interaction term (i.e. p-value less than or equal to .05), then the interaction term plus the component parts (regardless of whether or not the component parts achieve statistical significance) are kept in the regression equation.

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[37] A discussion of the creation and structure of dummy variables occurs later in this chapter.

Before concluding the discussion on the general methodological approach taken for this thesis, one final issue should briefly be addressed. Specifically, what was the criterion for deciding whether to keep a term in the regression model or to remove it from the structural equation altogether? The basis of the decision rests upon a test of the null hypothesis of zero population slope[38] (i.e. that the independent variable 'X' has zero effect on the dependent variable 'Y'). The level of statistical significance for what constitutes a substantial departure from zero was set according to (1) the size of the sample, (2) the desired level of precision (i.e. what probability of error is acceptable); and (3) the theoretical statement of the hypotheses. By the phrase "desired level of precision" I am referring to the willingness to make either a Type I or a Type II error. The overall level of significance set for the findings reported in this thesis is .05.

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[38] The "null hypothesis" can be interpreted as stating that no relationship exists between the variables hypothesized to be behaving in a specified way. It asserts that any differences we may observe in the behaviour of the dependent variable is not attributed to the influence of the independent variable but rather is the consequence of the combination of natural random variation in the dependent variables and the laws of chance.

INSTRUMENT CONSTRUCTION

Origin of Items

The vast majority of items selected for my survey instrument are taken from the 1987 National Opinion Research Centre's General Social Survey (NORC). For the most part the questions have been unaltered, although in several instances the content is slightly modified to capture issues and subject matter germane to the current Canadian climate. The principal exception to this practice occurs in the selection of the independent manipulations. The open-ended manipulation is taken from Rosenblatt et al's (1989) study of the effects of mortality salience on the assignment of bond to a convicted prostitute (presented by these researcher as the Mortality Attitudes Personality Survey - MAPS). Another exception to the NORC General Social Survey origin of the current survey's items is the four items chosen to measure religiosity. These items are selected from the Jennings-Niemi Study of Political Socialization (ISR, 1973).

Construction of Manipulations

Open-Ended Questions:

Subjects in the experiment were asked to answer three open-ended questions on one of three randomly assigned topics: one third of the subjects wrote on death, one-third wrote on exam failure, and one third wrote on their favourite vacation spot. Specifically, subjects who wrote on the death topic were asked: (1) "Briefly describe the emotions that the thought of your own death arouse in you"; and (2) "Briefly describe what you think will physically happen to you as you die"; and, (3) Briefly describe what you think will happen to you after your death, either spiritually or physically". While this third question is not a part of Rosenblatt's independent manipulation, it was added here in an attempt to measure the "spiritual" dimension of mortality awareness.

In a comparable fashion to the mortality anxiety manipulation, exam-failure anxiety is similarly presented by the following three open-ended questions: (1) "Briefly describe the emotions that the thought of failing a final exam in a course required for your graduation arouses in you"; (2) "Briefly describe what you would feel like during the final exam of a required course as you realize that you almost certainly will fail it"; and, (3) "Briefly describe what you think will happen to you after you find out that you failed the final exam in a course required for your graduation".

The final anxiety context - or rather the "no" anxiety conditions (nine through twelve) - is also operationalized by three open-ended questions relating to an innocuous topic (subject's favourite vacation spot). Once again questions are phrased in analogous form to the mortality anxiety and exam failure anxiety questions: (1) "Briefly describe the emotions that the thought of your favourite vacation spot arouses in you"; (2) "Briefly describe the activities that you will do while on holidays at your favourite vacation spot"; and (3) "Briefly describe the state of mind you think you will be likely to experience while on vacation".

Forced-Choice Manipulations:

Two additional measures of anxiety - the Templer Death Scale[39] and the Cognitive Test[40] - are also employed in this study. The position of these items relative to the dependent variable in the experimental conditions (refer back to Table One) determines the function they will play in the study. They either heighten already aroused anxiety from the open-ended manipulations, introduce a specific type of anxiety into conditions measuring other forms of anxiety, or act as manipulation checks of the open-ended manipulations. At present, I am only interested in the stimulus function of the Templer Death Scale and the Cognitive Test (ie. heightening anxiety and introducing anxiety).

In experimental conditions one and two mortality anxiety is heightened by the inclusion of the Templer Death

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[39] Refer to Appendix B for a complete list of the questions comprising the Templer Death Scale.

[40] Refer to Appendix C to see the specific questions asked to measure cognitive ability.

Scale prior to the series of dependent variables. By contrast, in experimental conditions five, six, nine and ten, the Templer Death Scale serves to introduce mortality anxiety into the experimental condition. Thus, depending on the experimental condition, mortality anxiety is operationalized either by the three open-ended questions, by the nine forced-choice questions comprising the Templer Death Scale, or by the combination of both the open-ended mortality manipulation and the forced-choice Templer Death Scale.

In the exam failure anxiety conditions, the cognitive test is used to mimic the Templer Death Scale. While the Cognitive Test heightens exam-failure anxiety in conditions five and six, it introduces exam failure anxiety into the experimental setting in conditions one, three, nine and eleven. Thus, in parallel form to the mortality anxiety conditions, exam failure anxiety is operationalized either by three open-ended questions, by a series of forced-choice cognitive questions (functionally similar to the Templer Death Scale) or by the combination of the open-ended exam-failure manipulation and the Cognitive Test.

Dependent Variable

This thesis examines the dependent variable -

Intolerance of Others[41] - in an attempt to capture the cultural "outsider" or cultural "deviant" in contemporary Canadian culture. Pinpointing a specific element in Canadian society with which a majority of individuals would label "deviant", as Rosenblatt et al (1989) appear to have achieved in their identification of the prostitute in the United States, however, is very difficult. As a consequence, in place of the single prostitute target, a variety of figure types (possible targets) have been identified and a variety of contexts have been provided in order to establish generalizability of the findings.

In order to present figures as "outsiders" or as "cultural deviants" I assume that the selected figures will be perceived as deviant by the majority of respondents. This assumption does not guarantee exclusive agreement by any means, but it is believed that the figures proposed represent examples of cultural deviants in our society. The belief that the target figures selected represent cultural deviants is not solely my own individual belief but rather it is a belief that is shared by many other researchers. Why else would these target figures be included in such prominent social science survey instruments as the National

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[41] While other dependent variables were included in the survey instrument - such as criminal scenarios and degree of admiration for villains, heroes and fools (business tycoons, sports and cultural figures, and political personalities) - only the results from an investigation into the conditions under which subjects extend civil liberties to others are discussed due to space constraints of this theses.

Opinion Research Centre's General Social Survey?

The examples of cultural deviants presented to subjects in the experimental conditions have been selected for two reasons. First, they are examples of individuals who have been conveyed as cultural deviants by the mass media (take Rushton, Keegstra or Zundel, for example). Second, they represent ideological positions that contradict the tenets of the definition of Canadian culture outlined earlier in the Conceptual Framework chapter of this thesis.

One exception to the above two selection criterion is the individual who favours legal access to abortion. Despite this figure's inability to satisfy both criterion, however, the debate revolving around the legality of abortion has raised such a furore in the media that this example of a cultural deviant is expected to be highly sensitive to behavioral changes in subjects induced by the mortality salience manipulation. Each of the "deviant" types will be discussed in turn but first a brief discussion of the contexts in which the target figure appears is presented.

The dependent variable is intended to measure the subject's willingness to extend civil liberties to different types of cultural deviants. The original set of items, designed by Samuel Stouffer during the 1950's, ask subjects whether a "target" figure should be allowed to speak in public meetings, teach in universities, and have books written by the target figure remain in the library. The target figures in the Stouffer study were atheists, socialists and communists.

Stouffer's civil liberty items have been widely used in the social sciences and they have displayed a very high level of robustness and general applicability to a wide range of substantially different subject areas. In fact, Stouffer's items are so context-neutral that in a relatively recent replication of Stouffer's 1955 study of attitudes toward civil liberties, Williams, Nunn & Peter (1976) found that the original targets - atheists, socialists and communists - still operated effectively as measures of intolerance of nonconformists. They note, however, as Stouffer predicted, that tolerance toward non-conformists has greatly increased since the original Stouffer study conducted in 1955. It may well be, as Crockett (1976) has suggested, that the indication of increased tolerance found by Williams et al (1976) may be an artifact of the political climate and that if these researchers had selected targets that more adequately represented non-conformist figure types in 1976, the increased tolerance level would not have been witnessed.

Perhaps as a consequence of a similar argument to that made by Crockett (1976) the Stouffer tolerance items have been modified slightly by the National Opinion Research Centre (NORC) for use in its General Social Surveys.

Specifically, the NORC survey has dropped socialists from its surveys and has added homosexuals, racists, and fascists (1987). To capitalize on issues germane to the current Canadian scene, this thesis proposes five target figures: atheists (from Stouffer study), racists, homosexuals, fascists (from NORC), and pro-abortionists (own).

The Stouffer items are extremely useful as a dependent variable in the context of this thesis because they introduce tension into the study. On the one hand subjects may have a fairly strong commitment to freedom of expression and movement; on the other hand subjects may strongly oppose the target figure. Thus, if they decide to be tolerant of the target figures in order not to sacrifice their commitment to the right to freedom of expression they must concede that right to individuals who may directly contradict their belief in the equality of all peoples. The reverse decision similarly requires that the subject rescind his advocacy of freedom of expression. The tension arising out of the imposed contradiction results in an increased sensitivity in the dependent variable to differential behavioral responses.

Taken together the proposed target figures are intended to represent the "deviant" or "outsider" from the more widely shared Canadian culture. While I assume that the atheist, homosexual, racist, fascist and pro-abortionist represent "outsiders" and that they will be perceived in general by subjects as cultural deviants, a few comments are required in order to establish the viability of this assumption.

In a recent Working Paper (number 24) on the "Sociopsychological Costs and Benefits of Multiculturalism" (1991), J.W. Berry outlines the underriding components of multicultural policy as enacted in 1988. Specifically, he identifies the key components as: the principle of "freedom from discrimination based on culture, religion or language" and the notion of "the equality of opportunity, regardless of race, national or ethnic origin, or colour" (Berry, 1991:3). As these policies are enacted in law, which Durkheim (1961) convincingly argues is a formalized statement of that society's beliefs values and norms, or in other words, their cultural worldview, it is possible to conclude that individuals who could clearly be conceived as racist or fascist would be perceived as deviants who threaten the "normative" cultural principles of equity and freedom from discrimination.

Support for including homosexuals and pro-abortionists as target figures rests on a very different foundation. Over the past five years a dramatic increase in homosexual liberation and an overall heightening of awareness to the injustices and prejudice directed toward homosexuals in both social and professional spheres has been witnessed. While homosexuals enjoyed a temporary increase in "acceptance" (though by no means an egalitarian positioning in society) this "tolerance" has been significantly moderated by the proliferation of the association of AIDS with the homosexual community and by its "public birth" in our sacred religious institutions.

Pro-abortionists have experienced a similar fluctuation between community acceptance and rejection as new parties (such as the Lambs of Christ) enter into the debate and cast doubt and fear into the minds of people wavering on the border between a pro-abortion and anti-abortion position. In fact, the debate has become so heated that the ontological status of the fetus has made its way through all legal channels to the supreme court. This entanglement with attitudes toward abortion and legal definitions of what constitutes life not only highlights the contentious nature of the issue, but also demonstrates the significance attached to the issue for the moral composite of Canadians by our political moral watchdogs.

As the abortion issue appears in this thesis as both an independent and dependent variable it is important that the reader distinguish between the Abortion Intolerance Scale and the initial Attitudes Toward Abortion Measure. The Abortion Scale is comprised of three items measuring subjects' willingness to extend civil liberties to pro-abortionists (right to speak in a public place, right to teach at a college or university, and right to have a book expressing pro-abortion views in a public library). The Attitudes Toward Abortion Scale, on the other hand, consists of four items that measure subjects' attitudes toward the act of abortion under a given set of circumstances (ranging from not liking the sex of the fetus to pregnancy as a consequence of an act of rape). It is also noteworthy that while the abortion dependent variable (Abortion Intolerance Scale) does not capture behavioral change induced by mortality anxiety, the abortion covariate (Attitudes Toward Abortion Measure) does prove to be a significant determinant of differences in subjects success (or lack thereof) on the test of cognitive ability following exposure to mortality anxiety.

Support for the final target - atheists - derives from the historical progression of increasing secularization at the expense of the religious community. Individuals subscribing to a religious interpretation of their existence may feel challenged by those who blatantly undermine their belief in a higher order.

To commence scaling of the dependent variables, each civil liberty subject is transformed into a specific intolerance scale. All scales, with the exception of the fascism scale, reveal highly positively skewed distributions in the direction of tolerance. By contrast, the fascism scale reports a very even distribution of cases across its values, so similar in fact that the distribution has the appearance of a plateau (i.e. approximately equal number of cases for each of the variable's values).

Once all subject-specific civil liberty scales are created and the relationships between them and the experimental conditions and covariates investigated, factor analysis of the scales is conducted to create a more generalized intolerance scale.

Factor analysis identified two distinct factors - one consisting of the combination of the subject specific tolerance scales related to homosexuality and pro-abortion, and one dimension comprising the racism and fascism scales. The atheism scale loads best with the fascism and racism scale but its communality was almost .2 lower. Nonetheless, the atheism scale is included into the generalized tolerance scale along with the fascism and racism scales in order to ensure that the construct represents general intolerance rather than some more specific construct such as anti-racism.

The generalized Intolerance Scale ranges from zero to eleven with zero representing high tolerance and eleven indicating high intolerance and reflects a normal distribution of cases across its values.

Measures of the Covariates

Essentially the survey instrument used in this thesis incorporates two types of covariates. The first category includes the Templer Death Scale and the Cognitive Test as they potentially intervene between, or interact with, the experimental manipulation.

The Templer Death Scale, originally comprised of 18 closed-ended items, has been abridged to contain only nine items. The other nine items are excluded because of ambiguous wording (i.e. presence of double negatives or overly general wording) or because they replicate the essence of the nine already chosen. A final criterion of the items was that they had to clearly represent either a physical or symbolic (non-physical) orientation toward death.

Up to this point I have assumed that the Templer Death Scale does, in fact, measure only one latent construct - fear of death. However, item-item correlations revealed a tremendous disparity in the degree of association present among the items. At one extreme correlations as low as .03 are recorded while at the other extreme correlations reached as high as .60. These results suggest that the items are not capturing a single construct.

As expected, factor analysis identified two distinct constructs - one capturing the anxiety element of death and one capturing a physical embodiment of death accompanied with fear[42]. The findings of an anxiety dimension and a fear dimension in the physical realm suggests the need to distinguish between the states of anxiety and fear as proposed by Heidegger. Future research should address this distinction. But while these distinctions may be insightful theoretically, dividing the Templer Death Scale along these theoretical divisions did not facilitate the discovery of the mechanism in the transferring knowledge of one's own mortality into behavioral agency.

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[42] The two factors are based on only six of the nine items incorporating the Templer Death Scale. Three of the items - thought of death, sight of a dead body and perception

The Cognitive Test consists of seven forced-choice cognitive questions taken from the 1990 LSAT and GMAT practice examinations. The construction of the Cognitive Test introduces a number of unique problems not present in the creation of the other scales. Of particular import, the items to be incorporated are dichotomous correct/incorrect answers embodying different levels of difficulty.

Traditional methods of factor analysis reported three independent factors, although the third factor appears to be a "catch-all" as the two variables identified as its constituents do not demonstrate any degree of communality with each other. Ten Berge (1972) suggests that at least two factors are usually delineated for items ranging in difficulty simply as the by-product of the varying difficulty levels. The apparent multidimensionality of the items may, therefore, only be an artifact of an "artificial

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that future has nothing to fear - did not associate with either of the factors.

difficulty factor".

Results from Mokken analysis indicate that seven of the eight cognitive items proposed can be incorporated into a single scale with moderate strength ($H > .400$). The final item did not achieve scalability, perhaps due to its extreme difficulty. When the ICC's (Item Characteristic Curves) recorded for each of the eight cognitive items[43] are examined, both assumptions of double monotony are generally satisfied.

The second set of covariates consists of those variables measuring attitudinal dispositions. Included in this area are attitudes toward abortion[44], religiosity and existential meaning.

The four questions addressing attitudes toward abortion[45] can be understood as a hierarchical set of statements such that if subjects say abortion should not be allowed for condition four, then they should also report that abortions should not be allowed for conditions 3, 2, and 1. The reverse, however, does not apply.

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[43] There are actually a total of ten cognitive questions on the survey instrument, but one is an interpretation of a poem and one requires the interpretation of a reading passage and drawing out its implications. These questions do not participate as part of the correct/incorrect cognitive scale.

[44] Again it is important that the reader distinguish this measure of attitudes toward abortion from the dependent variable that measures the willingness of subjects to extend basic civil liberties to targets in favour of legal access to abortion (items collectively referred to as the Abortion Intolerance Scale).

[45] Refer to Appendix C for a list of the actual items.

As the individual items report high levels of association (correlations reaching as high as 0.74), factor analysis of the items was not conducted. Instead the values of all five of the abortion items were summated to form the abortion covariate scale. Its values vary from four to twenty where four indicates a pro-abortion or pro-choice attitudinal disposition and twenty represent an anti-abortion or pro-life stance. The scale shows no evidence of skewedness and reports a good distribution of cases across its categories.

In total six items measure the concept of religiosity[46]. Two of these items - frequency of church attendance and belief in afterlife - are adopted from the NORC General Social Survey (1987). The remaining four items examine beliefs about God and the Bible, religious commitment and the relationship between religion and life purpose. They are taken from the Jennings-Niemi Study of Political Socialization (ISR, 1973).

Initial factor analysis identifies the presence of two factors - one capturing religious commitment and purposefulness of religion, the other identifying religious belief. Since the aim of scaling is to distinguish a single construct, I decided to force items to fit to a single factor. Communalities revealed that all items, with one exception, loaded similarly on a single factor (loadings ranging from 0.41 to 0.56). The final scale, consisting of five of the six religiosity items, ranges from zero to twenty-four where zero represents very high levels of religiosity and twenty-four indicated very low levels of religiosity or atheism.

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[46] It should be noted that for belief systems other than those embodying the Christian deity, subjects are told to reformulate the questions so that the appropriate deity, spiritual force, or religious teaching is represented.

The third attitudinal covariate measures existential meaning. The items for this scale come from The Purpose in Life Test (PIL), designed in 1964 by James Crumbaugh and Leonard Maholick. The PIL test, in its entirety, consists of twenty forced-choice items. However, there appears to be some conceptual confusion in the instrument. For example, Yalom (1980) has identified a total of six independent concepts in operation.

Five of the original twenty items are included in this thesis. Four of the items fall under the concept identified above as "life meaning" while the fifth, according to Yalom (1980) measures "life satisfaction". This last item was included even though it has been suggested that it measures an entirely different construct because (a) the continuum from routinization to excitement may in some senses be translated as analogous to the life-death equivalent identified by Lifton - the stasis/movement polarity, and (b) item-item correlations revealed a relatively high degree of association among all five of the items.

Non-rotated communal values from factor analysis indicate very high loadings on the "meaning" items (values ranging from $|0.52|$ to $|0.77|$). The ensuing "Meaning" scale ranges from negative seven (-7) to positive thirteen[47]. In comparative terms, positive two is an indication of relatively low meaning, while positive thirteen represents very high levels of existential meaning.

EXPLORING VARIABLE RELATIONSHIPS

Multiple Regression

Earlier in this chapter I noted that there were essentially two statistical procedures employed as the network of relationships present among variables was explored. Analysis of variance primarily detects only experimental manipulation effects. In order to investigate overall model effects it is necessary to turn to the multiple regression procedure.

This section begins with a mathematical representation of a structural regression equation. It continues with a brief definition of the constituent parts of the equation.

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[47] The negative starting range is due to the reversed direction of two of the items. While typically items would be rescaled so as to create an entirely positive valued scale, this step was deemed unnecessary because valid overall scale ranges began at positive two: that is, no cases recorded overall meaning scores of less than zero. These findings suggest that subjects do not typically portray themselves as having little purpose in life.

A discussion of the techniques available for the detection of some of the more complex covariate relationships (specifically as they are involved in quadratic forms) follows. Finally, the problem of outlying cases is addressed.

The following regression equation incorporates an example of each of the types of variable structures that come to play a part in the complex system of effects influencing the dependent variable (intolerance) in this research. It does not express any of the actual causal models found in this thesis.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_1X_2 + b_5X_2^2 + u$$

In this equation 'Y' is the value of the dependent variable; the X's are the independent variables (covariates or dummied experimental manipulations); the b's are the slopes (the direction and amount of change elicited in the dependent variable as a consequence of the unique independent variable with which it is associated); the 'a' is the intercept (the mean value of Y when the other variables equal zero); and, the 'u' is the disturbance term or error associated with the dependent variable 'Y'.

From this equation it is also possible to discern four types of effect elements. The term 'b_1X_1' is an example of a dummy variable used to represent a single experimental manipulation. The terms b_2X_2 and b_3X_3 are examples of covariate variables. The product term $b_4X_1X_2$ represents an example of interaction and finally, the term $b_5X_2^2$ represents a quadratic relationship. Each of these unique elements are independently elaborated upon below.

Dummy Variables:

To create a dummy variable, the experimental condition of interest (i.e. condition 1) is assigned a value of one while all other conditions are assigned a value of zero. This transformation accomplishes two ends. First, the mean of a dummy variable equals the proportion of cases assigned a value equal to one. Thus in the context of creating dummy variables for experimental manipulations we are able to identify the proportion of cases determining the behavioral effect of the experimental manipulation on the dependent variable. Second, dummy variables isolate the effect of a single condition on the dependent variable. Thus it is possible to determine the unique effect the experimental manipulation has on the dependent variable (i.e. it identifies what effect mortality salience has on intolerance of cultural deviants).

Covariates:

Covariates, as represented in the structural regression equation on page 108 by the terms X_2 and X_3, are predictor variables other than the experimental manipulation that contribute to the variation in the dependent variable. Covariates can operate independently (exerting a direct significant effect on the dependent variable) or they can be involved in product terms wherein the value of the covariate is raised to an exponential power or whereby two or more covariates are involved in a multiplicative relation with each other.

Quadratic Relationships:

As inferred in the discussion of covariates there are essentially two types of quadratic relationships; those involving a single variable raised to some exponential power, and those involving two or more independent covariates. The term '$b_5X_2^2$' in the regression equation on page 108 represents an example of the first type; the term '$b_4X_1X_2$' depicts an example of the latter type.

It is possible to have interaction involving only a single variable. That is, the effect a variable has on the dependent variable may be conditioned on the value of itself. More commonly, this phenomenon is referred to as "nonlinearity". The presence of nonlinearity can be especially worrisome because of the manner in which multiple regression fits the scatter of data points. The key here is that multiple regression operates by fitting a "best fit" hyperplane onto the data points so as to minimize the degree of fluctuation of points around the regression surface.

When the actual relationship between two variables is curvilinear, the specifics of that relationship are lost when constrained by linear terms.

The second possible expression of a quadratic relationship is the situation in which the effect a variable has on the dependent variable is conditioned on the value of a second variable (a situation more commonly referred to as "Interaction"). There are two basic forms of interaction: interaction between a continuous covariate and a dummy variable, and interaction between two or more continuous covariates.

How does the researcher detect evidence of quadratic relationships among variables? One strategy, and that most commonly employed, plots the residual error from the regression equation and examines the plot for any evidence of a pattern among the data points. Deciphering residual plots can be more difficult than one would first expect. Rarely, if ever, do the residual scatterplots depict any discernible pattern, especially when using individuals as the unit of analysis. Thus the identification of nonlinearity can be seen as an exploratory approach, an approach of repeated trial and error.

Typically if a nonlinear relationship is suspected, a transformation that allows the nonlinear effect to assume the character of a linear effect is introduced into the structural regression equation. This can be accomplished either by taking the natural logarithm of both sides of the structural equation, or by raising the variable to an exponential power - usually its square or cube, depending on the number of bends in the curve. For the purposes of this thesis, the latter of these two methods is used.

There are two ways to search for evidence of interaction: a confirmatory search in which the researcher includes an interaction term in the structural equation because of its existence in other research; and an exploratory search in which the researcher systematically examines the interaction potential of each of the covariates with the experimental manipulation and the other covariates. Exploratory searching forms the basis of this thesis. As no previous research poses interactions with specific covariates in the investigation of mortality anxiety, this thesis assumed an exploratory search technique.

The general exploratory procedure for the identification of evidence of interaction comprises three steps: (1) analyzing the correlation of pairs of covariates and/or the correlation of covariates with a dummied experimental condition variable; (2) testing the null hypothesis of no interaction; and (3) conducting regression analysis which introduces the interaction terms into the structural regression equation.

One difficulty of the exploratory approach is the issue of false positives (statistically termed Type I errors), in which the effect relationships achieve statistical significance even though they may be an artifact of the probabilities of chance. The reverse scenario is also problematic. A covariate term may be eliminated from the regression equation because it does not report a statistically significant impact on the dependent variable when actually it plays an influential role in conditioning the effect between the manipulation and the dependent variable. This latter process is known either as the issue of false negatives or the probability of committing a Type II error[48].

The Problem of Outlying Cases

As the overview of the problem of quadratic relationships indicated, the estimated regression surface or hyperplane in the multidimensional context is one that best minimizes the amount of variation in the dependent variable. "Best-Fitting" a plane to the data in this way has one obvious consequence: not all cases will be proximate to the regression surface. While the coefficient of determination (r-squared) coupled with the standard error of the estimate can provide a fairly reasonable idea as to the amount of variation in the dependent variable, it cannot isolate specific cases that exhibit responses or tendencies contrary to the general trend of the other cases. Most introductory textbooks suggest that the researcher go directly to a scatterplot of the residuals and look for patterns among the residuals or for extreme outlying cases. These recommendations work best with aggregated data and exceptionally high coefficients of determination. With the adjusted r-square obtained for the Mortality Salience pattern of conditions regression equation in the neighbourhood of only 23% explained variance and the relatively large sample size (151 cases), I did not expect a residual scatterplot to provide any semblance of a pattern among the residuals. Nor did I expect that a visual analysis of the residual scatterplot would facilitate the identification of a single outlying case.

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[48] A Type I error is committed when a true null hypothesis is rejected. A Type II error is committed when the researcher fails to reject a false null hypothesis. The probability of committing a Type I error is equivalent to the alpha level while the probability of committing a Type II error is equal to beta. This latter probability is extremely difficult to estimate, but one can rely on the inverse relationship between alpha and beta to give some indication of the probability of Type II errors in the research project. The inverse relationship between alpha and beta can be expressed as follows: as the probability of alpha increases, the probability of beta decreases. Since the researcher is usually unable to determine the value of beta, it is recommended that s/he try to attain as small an alpha as possible in order to ensure that the findings reported are really not capitalizing solely on chance (Ott, Larson, and Mendenhall, 1987).

Kenneth Bollen and Robert Jackman (1990) have recently investigated several diagnostic tools developed by statisticians that enable the researcher to identify one or more specific case(s) that influence the relationships present among variables. Three issues require consideration here: (1) What is an extreme case?; (2) How are influential cases located? (i.e. how does the researcher know whether an extreme case merely lies away from the regression surface or whether it significantly influences the direction and/or strength of the regression plane?); and (3) Once identified, how does one deal with influential cases?

Bollen and Jackman (1990) identify three types of extreme cases: outliers, high leverage cases, and influential data points. An outlying case is one that departs significantly from the average value of the dependent variable but has no effect on the slope of the regression plane. Outlying cases do, however, influence the intercept and reduce the proportion of explained variance in the dependent variable. Neither of these consequences raise serious concern for the researcher.

A high leverage case[49], by contrast, departs from the other cases in its relationship to the independent variables rather than the dependent variable. Because high leverage cases do not distort either the slope or intercept they actually are informative for the researcher. By expanding the variation in the independent variables they suggest that the estimated sample regression surface provides a good estimate of the population regression plane.

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[49] In the bivariate instance, leverage can be calculated by taking the squared distance of the extreme case from the mean of the independent variable and dividing by the average squared distance of all cases from the mean of the independent variable. In the multiple regression context, leverage is calculated in a similar fashion except the squared distance occurs in a k-1 dimension (where k = number of independent variables) and the mean of the independent variable is now the centre point of the k-1 dimensional space.

Finally, an influential data point, can be understood as a combination of the features of an outlying case and a case with high leverage. That is, influential cases depart from both the average value of the dependent variable and from the mean of the regression plane. Influential data points thus significantly influence the slopes and/or direction of the effects present among variables and detract from the estimation power of the sample.

How does one recognize whether a case operates merely as an outlier or whether it functions as an influential data point? According to Bollen and Jackman (1990), one starts by conducting several tests on the regression equation residuals. First, obtain a leverage value for each case in the sample. Then use a second diagnostic tool known as Cook's D. This statistic calculates the change in the set of coefficients (in the regression surface) that would occur if the identified case is eliminated from the field of influence (from the sample).

Because Cook's D considers both the variation in a case away from the independent variables as well as the residual variance of the sample and of the disturbance terms, it is the most powerful of the diagnostic tools. Yet, on its own, the Cook's D cannot determine what magnitude the outlying case has on a specific regression coefficient. For this reason, a third residual diagnostic tool - DFBETA - is needed.

The DFBETA's allow the researcher to identify not only the change in regression coefficients that would occur if an outlying case was excluded from the analysis, but also identifies, in the multiple regression context, what effect the outlying case has on _each_ of the coefficients associated with the independent variables. Obviously cases outlying on the experimental manipulation variables will be of utmost concern as they may indicate that the apparent effects of the manipulation on the dependent variable are really only an artifact of a single individual's behavioral response to the experimental manipulation.

What happens once cases have been identified by the diagnostic tools as influential data points? Can they just be discarded from the sample? The answer to the second question is "No". The residual diagnostic statistics should be employed to mark cases for substantive questioning: Do they satisfy the requirements of the sample?; Do they share some common characteristic that has yet to be included in the regression equation? Influential data points should not be used as sufficient support for excluding cases from data analysis. Thus the calculation of the diagnostic tests is just the first step in the identification of outlying and influential cases.

The second stage of the regression diagnostic process consists in the creation of dummy variables for the identified outlying cases. The dummied influential cases are then introduced individually into the regression equation. This step is equivalent to eliminating the data point from the field of analysis. By this process the researcher can investigate the strength and direction of the regression coefficients for each of the other variables in the structural equation. As such it can be determined if the extreme case in question suppresses or exaggerates the relationship among variables or whether its influence is inconsequential to the other coefficients.

If the extreme case exaggerates the effect between the explanatory and dependent variables, then the researcher must carefully investigate all elements of the theoretical assumptions and hypothesized relationships as well as postulate the inclusion of new variables into the regression equation in order that the conditional or intervening variables be identified. In this way regression diagnostics furthers the theoretical arena by calling into question its assumptions and/or requiring an elaboration or redefinition of the existing model.

THE SAMPLE

A final area that falls into the domain of methodology and research design, is the issue of sample selection.

The subjects who participated in this experiment consist of 332 undergraduate students registered in junior and senior level sociology courses at the University of Alberta in the spring of 1990. All subjects provided the researcher with semi-informed consent to participate in the research[50].

Typically, employing a student population raises some concern about the generalizability of the research findings. However, since Rosenblatt et al (1989) verified the validity of the experimental results of their student population samples with a sample of municipal court judges, this lends some credibility to the generalizability of the results from a student population. While this may quell some fears as to the generalizability of the results from a student population, there is one characteristic of sociology students that requires consideration.

Generally, the subject matter of sociology courses requires that students be open-minded toward, and tolerant of, others perceived to be different from themselves. This is an especially relevant consideration since one of the courses in which this research was conducted was a Sociology of Deviance course. As a consequence of the subject matter and theoretical approaches introduced in sociology courses, subjects may be more tolerant of perceived "outsiders" than is true of the general population and therefore may be more reluctant to punish "outsiders". The additional tension introduced into this thesis by the contradiction between student's relatively higher tolerance of deviants and general respect for freedom of speech and action, should increase the sensitivity of the dependent variables. Thus, any results in the predicted direction of intolerance toward others after one's awareness of his own mortality has been induced, may underestimate the actual level of intolerance that would be witnessed outside of post-secondary institutions.

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[50] Consent can only be classified as semi-informed because the true intent of the research could not be revealed for fear of confounding the experimental results. Any statement informing students that the research was studying the effect of death awareness on future behaviour could have been sufficient in itself to raise the subjects' consciousness of their own mortality. Thus, mortality awareness would have been induced even in those subjects who were to be assigned to the control conditions. In order to convey the interests of the researcher as much as possible, a cover-story was developed that partially revealed the intent of the research. Subjects were informed that the research was designed to study the relationship between cognitive ability and attitudes toward others. The cover-story employed was approved by the Department of Sociology Ethics Committee in accordance with the University of Alberta Policy Related to Ethics in Human Research.

Description of the Sample

The basic demographic features of the sample are as follows. The age of subjects ranges from 19-80 years old, with a mean age equal to 24.82 (standard deviation = 6.50). It should be noted that the age distribution had a large positive skew with 72.2% of subjects falling between the ages of 18 to 23.

Large differences in the gender composite of the sample were also noted. A significantly higher percentage of females (69.3%) than males (30.7%) participated in the experiment. This unequal gender distribution is indicative of the gender composite present in the department of sociology in general and does not reflect a bias unique to the classes in which the experiment was conducted.

Frequency distributions of subjects' religious orientation and belief structure reveal some interesting patterns. Two-thirds of subjects report belonging to either Protestant or Catholic denominations (67.9%) with the majority of remaining subjects stating that they had no institutionalized religious orientation (17.6%). Measures of religious conviction are consistent with the other dimensions of religion above, with 65.4% of subjects reporting that they either believe unquestionably in the existence of God, or that while they have some doubt, they still believe in God[51]. Only 3.9% of subjects stated that they definitely did not believe in God or a higher power of some form. In another measure of religious conviction, the majority of subjects (59.0%) supported a non-literal interpretation of the Bible (or other religious doctrine) believing that the Bible was written by men inspired by God, but which contained some human errors.

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[51] It should be noted that in the survey question, subjects were asked to substitute the name of the deity in which they believed if they did not subscribe to the Christian faiths.

Other measures of religious conviction examined subject's association with religion as providing a unique purpose for life. Slightly over half of the subjects (50.8%) report that they agreed or strongly agreed with the statement that, "One's religious commitment gives life a certain purpose which it could not otherwise have". Similar results are recorded for the interpretation of the statement, "Religion provides the individual with an interpretation of his existence which could not be discovered by reason alone": 44.1% of subjects agreed or strongly agreed with this statement. The slightly lower percentage of subjects agreeing to the second of these two statements may be due to the latter's conception of religion embodying an irrational element.

Are the religious beliefs and convictions of subjects translated into action in the form of attendance to worship services? The answer is an unequivocal No. In fact, a full 74.8% of subjects attend religious services less than once a month, with nearly half (47.3%) stating that they attend services only once per year or not at all.

One final comment with regard to subject behaviour is worth noting here. Subjects were allowed no longer than forty minutes to complete the package of questions. In retrospect the survey instrument was not adequately pretested and so during the course of the actual experiment we found that a disproportionate number of subjects failed to complete the last five questions that examined life history events such as the number of traumatic events experienced by the subject in the past five years. These questions had been intended to probe the potential interaction of the relationship between the proximity of life events to anxiety salience to see if the recent personalization of death would especially motivate subjects to employ death transcendence techniques, and thus, to be significantly more _in_tolerant of the target figures.

Time constraints may also have been a factor in the slight attrition in sample size. Three hundred and thirty two (332) subjects participated in the original research, but the final sample size was reduced by thirty-eight cases (n=294). Not all of the cases are lost due to time constraints, however. Some subjects may simply not have been able to respond to the cognitive questions. Since surveys with missing values on one of the variables in the regression equation are excluded from the regression equation, it is possible that the difficulty of the cognitive questions unnecessarily reduced the overall sample size.

CHAPTER SUMMARY

Over the past chapter I outlined the various processes underlying the exploratory approach to data analysis. In particular the search for unidimensionality among survey items was a key component of the creation of scales and the identification of higher-order latent constructs. With the exception of the cognitive items, this search consisted of traditional factor analysis techniques and correlational analysis of the items. A Mokken analysis technique was employed for the cognitive items because of their dichotomous nature and the inherent differences in difficulty among them.

Also investigated in this past chapter were the procedures by which relationships among covariates are explored and how more complex quadratic relationships are detected. Finally, the differences between outlying, high leverage, and influential data points were discussed and the residual diagnostic tools that aid in the detection of influential data points were identified. Finally, this chapter examined how cases defined as influential data points could be treated.

ANALYSIS OF THE DATA

The investigation of the data begins with an examination of the average levels of intolerance of cultural deviants according to experimental condition. More specifically, this chapter begins with a test of the null hypothesis that mortality salience is unrelated to intolerance of cultural deviants. As the F-ratio of 1.10 (p >.05) in Table 2 illustrates, the null hypothesis of no difference among the twelve conditional means cannot be rejected. That is, there appears to be no support for the hypothesis that mortality awareness motivates subjects to elevate their intolerance of cultural deviants.

Table 2: Conditional Means for Intolerance

F-ratio = 1.1100 p = .3528 df = 11,300

Type of Anxiety	Experimental Condition	Conditional Mean
Mortality	1	4.82
	2	6.46
	3	4.77
	4	4.63
Exam-Failure	5	5.23
	6	4.89
	7	5.13
	8	5.29
Control No Anxiety	9	4.39
	10	4.74
	11	5.20
	12	5.27

A closer look at the individual means, however, shows that the average level of intolerance for subjects in experimental condition two is 6.5 units on an 11 point scale; a level approximately 1.7 units higher than subjects in the other mortality salience conditions.

The first question arising from these results is "What makes condition two unique"? One distinguishing feature is the double dose of mortality salience - mortality salience aroused by the open-ended manipulation and mortality salience heightened by the forced-choice Templer Death Scale. But if Table 1 is recalled (presented in the Methods chapter), experimental condition 1 also has a double dose of death. So why weren't levels of intolerance for subjects in condition one similar to those displayed for subjects in condition two? Closer inspection of the design of the experimental conditions, reveals that experimental condition one had an additional item prior to the dependent variables - the performance test of cognitive ability. As this measure interrupted the heightening of mortality salience (i.e. it was positioned between the open-ended mortality salience manipulation and the Templer Death Scale) it is possible that it complicates the transmission of mortality salience.

While the inclusion of the test of cognitive ability seems to account for the differences in intolerance reported between conditions one and two, it is still perplexing why other experimental conditions that included a measure of mortality salience (specifically conditions four, six and ten) also did not demonstrate higher levels of intolerance of cultural deviants. Unlike experimental condition two, condition four did not have mortality anxiety heightened by the Templer Death Scale. Conditions six and ten did have mortality salience introduced by means of the Templer Death Scale but these conditions did not require subjects to write open-ended response to feelings of their death. These results would suggest that, unlike Rosenblatt et al (1989) who elicited behavioral alterations solely with the open-ended mortality questions, both the open-ended questions and the Templer Death Scale are needed in this thesis to sufficiently raise mortality salience to a height that influences human behaviour[51]. An additional reason for the need for the extra stimulus may be attributed to the relative insensitivity of the intolerance scale in relation to that of the dollar bond instrument used by Rosenblatt et al (1989) in their prostitution experiments.

As a similar orientation toward intolerance of cultural deviants does not appear for the other mortality salient conditions I was forced to reappraise the experimental design. In particular it was necessary to ask if the experimental conditions were sufficiently similar to warrant comparative study. I concluded that the experimental design tested two distinct experiments: one that registered the pure effect of mortality awareness on the dependent variables, and one that displayed the possibility of the cognitive test confounding or channelling mortality awareness as it affected the dependent variables.

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[51] Requiring a double dose of the manipulation receives some support from a study conducted by Gary Schulman (1974) in his study of "Race, Sex & Violence". Refer to the discussion section titled "Discussion of the Results" in the next chapter for a more detailed account of this finding.

The decision to investigate the data along the lines of two unique experiments - Mortality Salience and Mortality Salience plus Cognitive Ability - should provide a clearer picture of the effect of mortality salience on intolerance of cultural deviants. As the Mortality Salience Pattern set of conditions provides a study of the data without the potential confounding effects of the cognitive test, these data are presented first. Once they have been described, the results generated from the Mortality Salience plus Cognitive Ability Pattern of conditions are presented. Next the role of the Templer Death Scale and the search for evidence that it acts as a mechanism are investigated. A comparative of the Mortality Salience Pattern and Mortality Salience plus Cognitive Ability Pattern follows. Finally, a brief summary of the main findings concludes this chapter.

PRESENTATION OF RESULTS:

Mortality Salience Pattern Conditions

Table 3 (on the following page) identifies those experimental conditions pertinent for study under the Mortality Salience Pattern of conditions (for examining the effect of mortality salience without the confounding influence of the test of cognitive ability)[52]. Note that while all of these experimental conditions have the cognitive test positioned after the dependent variables, the Templer Death Scale varies in its position relative to the dependent variables. As discussed in the Methods Chapter, the differential positioning of the Templer Death Scale affects its role. Recall, that it is only when the Templer Death Scale precedes the dependent variables that it has the opportunity to operate as an intervening variable, and thus has the potential to act as the mechanism transforming mortality salience into behavioral agency.

Table 3: Mortality Salience Pattern Conditions

	Type of Anxiety	Position of Scales Relative to the Dependent Variables	
		Templer Scale	Cognitive Test
2	Mortality	Before	After
4	Mortality	After	After
6	Exam Failure	Before	After
8	Exam Failure	After	After
10	Control	Before	After
12	Control	After	After

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[52] For reference purposes, I have called the set of cognitive items incorporated into a scaling instrument the "Cognitive Test". It should be kept in mind however, that these items test cognitive ability and don't represent actual cognitive ability per se.

Having isolated this set of experimental conditions, let us once again examine the conditional mean intolerance of cultural deviants, this time reporting means for only those conditions participating in the Mortality Salience Pattern (note that Table 2 identifies the conditional means for _all_ experimental conditions).

Table 4: Conditional Means for Intolerance
Mortality Salience Pattern Conditions

F-ratio = 1.9350 p = .0916 df = 5,154

Type of Anxiety	Experimental Condition	Conditional Mean
Mortality	2	6.46
	4	4.63
Exam-Failure	6	4.89
	8	5.29
Control	10	4.74
No Anxiety	12	5.27

As the F-ratio of 1.9350 (p >.05) in Table 4 shows, the above analysis of variance does not achieve statistical significance. However, because condition two reports a substantively higher mean level of intolerance of cultural deviants, a t-test of mean differences that contrasts experimental condition two with the other conditions in the Mortality Salience Pattern (see Table 5) was conducted.

Table 5: Conditional Means for Intolerance
T-Test of Mean Differences - Condition 2 vs Others

T-Value = 2.8862   p = .0044   df = 158

Experimental Condition(s)	Conditional Mean
2	6.46
4,6,8,10,12	4.95

Results from Table 5 demonstrate that subjects in experimental condition two exhibit statistically significant higher levels of intolerance of cultural deviants (p <.01). In fact, condition two reports, on average, a level of intolerance 1.5 units higher than the average conditional mean intolerance for the other conditions comprising the Mortality Salience Pattern.

The significant difference in means found by the t-test suggests the need for a dummy variable for experimental condition two. Once created, the dummy variable was introduced into a basic structural regression equation. The results from this step are presented in Table 6. This Table simply expresses the difference between the mean level of intolerance for condition two as compared to the mean level of intolerance calculated for conditions 4, 6, 8, 10 & 12, reported in Table 5 in a regression context.

Table 6: Working Regression Equation
The Effect of Condition Two on Intolerance

Predictor Variable	Coefficient (b)	T-Statistic	P-value
Constant	4.95	22.64	.0000
Condition 2	1.51	2.89	.0044

F-ratio = 8.3299 p = .0044 n = 160

A final area of investigation with respect to the Mortality Salience Pattern of conditions dealt with the role of covariates. All potential covariates - religiosity, existential meaning, age, gender, beliefs, and attitudes toward abortion - were systematically explored. Those covariates emerging as significant predictors of intolerance toward cultural deviants are: religion, age (1-tailed test) and initial attitudes toward abortion.

In addition to exerting simple direct effects on intolerance, some of the covariates are involved in much more complex interaction relationships with each other or with experimental condition two. Specifically, significant interactions are found between gender and mortality salience (as evoked by experimental condition two), between gender and attitudes toward abortion, and a complex three-way interaction is present between gender, attitudes toward abortion and mortality salience.

The relationship of variables as they operate as predictors of intolerance of cultural deviants are depicted in a variety of presentation formats over the next several pages. First, I present the overall regression results for the Mortality Salience Pattern of conditions (Table 7). Second, I calculate a table of "Fitted Means" in which we calculate the expected average level of intolerance given selected values of the independent variables (Tables 8 & 9).

Table 7: Final Regression Equation
Outlining the Effect Relationships on Intolerance
Among Mortality Salience Pattern Conditions

Predictor Variable	Coefficient (b)	T-Statistic	P-value
Religiosity	-0.11	-2.678	.0083
Age	-0.06	-1.654	.1002
Gender (dmen)	2.21	1.459	.1468
Abortion	0.14	2.044	.0428
Condition2 (C2)	0.91	0.456	.6491
I.S.Condition2	-12.86	-3.226	.0016
I.S.Abortion	-0.30	-2.471	.0146
I.C2.Abortion	0.04	0.263	.7929
I.S.C2.Abortion	1.02	3.354	.0010

F-ratio = 6.11112 p = .0000 df = 9
Adjusted R-Square = .23000 (23%)

As seen in Table 7 there are a total of nine predictors of intolerance (covariates acting either independently or collectively in interaction patterns). Five of the effects are simple direct effects of a single independent variable on the dependent variable (i.e. religiosity, age, gender, abortion, and mortality salience [condition 2]). In addition, there are three two-way interactions (between gender and mortality salience [I.S.Condition2], between gender and abortion [I.S.Abortion]) and between mortality salience and abortion [I.C2.Abortion]. Finally there is one complex three-way interaction (between gender, mortality salience and abortion [I.S.C2.Abortion]).

The most important finding from Table 7 is the significant three-way interaction between mortality salience (as aroused by experimental condition two), gender and attitudes toward abortion ($p < .001$). Because of the complex nature of the interaction it is not possible to state (as the slope coefficient would suggest) that this term increases intolerance by 1.02 units. Tables 8 & 9 (to be discussed shortly) which present fitted means for the interaction will elucidate the actual pattern of effects.

Other significant interaction effects noted in Table 7 include the interaction between gender and abortion ($p < .02$) and the interaction between gender and mortality salience ($p < .01$). While the interaction between condition two and abortion does not achieve significance, the fact that it is part of the higher order three-way interaction requires that it be maintained in the regression equation.[53] Table 7 also shows that there are two covariates that have a significant direct effect on intolerance of cultural deviants - religiosity ($p < .01$) and attitudes toward abortion ($p < .05$).

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[53] Refer to the methods chapter for a more elaborate discussion of this requirement.

Tables 8 & 9 present the fitted means for the main three-way interaction between mortality salience, gender and attitudes toward abortion[54]. Fitted means are calculated by assigning a value equal to the mean for those predictor variables involved in the regression equation that are not involved in higher-order interaction terms. The mean values are then multiplied by their regression coefficient (slope) and the product is added to the intercept.

For dummy predictor variables (such as mortality salience - condition two), the value 1 or 0 is assigned depending on whether the expected level of intolerance for mortality salience is being examined (in which case the value 1 is substituted into all occurrences of the dummy variable[55]) or whether the expected level of intolerance for non-mortality salience is being investigated (in which case the value 0 would be substituted for all occurrences of the dummy variable). The values are weighted by the regression slopes and added to the total of the independent covariate and intercept effects.

Finally, a numerical value for the various attitudinal disposition toward abortion needs to be specified. To accomplish this, I partition the distribution into thirds along the abortion variable and then take the mean value of each third (rounded means equal 8, 12, & 16 for pro-choice, moderate stance, and pro-life attitudes, respectively)[56]. As was true for the assignment of values for the dummy variables, the appropriate value for the abortion variable are substituted depending upon the conditions stipulated by the cells of the tables of fitted means.

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[54] As we noted in our discussion of Table 9 this interaction is extremely strong, reporting significance at the .001 level.

[55] Recall from the Methods chapter the standard structural multiple regression equation and how a single variable can be present in several locations in a single equation. For example, a variable can exert an influence on the dependent variable both independently and by conditioning the effect of another variable.

Table 8 presents the fitted means for the three-way interaction between gender, mortality salience and attitudes toward abortion for females, while Table 9 displays the fitted means for males.

Table 8: Fitted Means for the Interaction between Mortality Salience Condition 2, Gender and Attitudes toward Abortion (Females)

	Abortion (pro-choice)	Abortion (moderate)	Abortion (pro-life)
Condition 2	6.094	6.854	7.570
Conditions (4,6,8,10,12)	4.844	5.411	5.978

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[56] Recall that the actual valid range of the abortion scale was between 4 and 20.

Table 9: Fitted Means for the Interaction between Mortality Salience Condition 2, Gender and Attitudes toward Abortion (Males)

	Abortion (pro-choice)	Abortion (moderate)	Abortion (pro-life)
Condition 2	1.163	4.760	8.356
Conditions (4,6,8,10,12)	4.646	4.008	3.370

We observe in Table 8 that females whose mortality has been made salient by condition two report an average level of intolerance 1.4 units higher than females whose mortality had not been made salient. The higher intolerance level of females whose mortality salience has been aroused is consistent across all attitudinal dispositions toward abortion. Table 8 also shows a generalized finding that females with pro-life attitudes are more intolerant of cultural deviants than their pro-choice counterparts.

In contrast, the mortality salience influence on intolerance is much more complex for males. From Table 9 we notice that there are very different levels of intolerance by males depending on whether their mortality has been made salient and depending on what their attitudinal disposition is toward abortion. In the case of pro-choice males, we see that males whose mortality has been made salient are much more tolerant than males whose mortality had not been made salient. By contrast, pro-life males whose mortality has been made sufficiently salient (as elicited by experimental condition two) are distinctively more intolerant of cultural deviants than pro-life males whose mortality has not been made salient: an average level of intolerance a full five points higher.

One final point of note for Table 9 is the roughly equivalent level of intolerance for males who report moderate attitudes toward abortion (i.e. who are not firmly committed to either a pro-choice or pro-life position). Regardless of the experimental condition, these males record an average level of intolerance between 4 and 5 units. The similarity of behaviour for this third of the male population is difficult to explain as earlier research by Rosenblatt et al (1989) excluded this middle group from their analysis.

Before being content with these results it is necessary to check for influential cases. An examination of the Cook's D and DFBETA'S for all cases in the mortality Salience Pattern of conditions identified three cases as potential influential data points[57].

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[57] The cutoff points for identifying cases as extreme are determined by the following cutoff points outlined by Bollen and Jackman (1990). For a more detailed discussion of the logic underpinning these points, refer to their discussion.

Table 1 : Residual Diagnostic Cutoff Points

	Low	High
Leverage (h_i)	2p/n	3p/n
Cook's D_i	4/n	1.0
$\lvert DFBETAS_{ij} \rvert$	2/sq.rt (n)	1.0

To test whether these cases confounded the strength and direction of the terms present in the regression equation, especially if outlying on the main three-way interaction coefficient of the experimental manipulation slope, the cases are prevented from influencing the regression[58]. With the exception of the interaction between experimental condition two and abortion, all predictor effects are actually being suppressed by the extreme cases. While the exception reports a substantial exaggeration from the original regression coefficient, this interaction is a lower order partial and has no direct influence on intolerance in the main regression equation reported earlier in Table 7.

Despite the suppression agency of the outlying cases, it is still necessary to assess whether there existed a substantive reason for removing the cases from the regression equation. Exploration of a variety of covariates did not uncover any variable that could account for the differential behaviour of the outlying cases[59]. As a substantive reason for eliminating the outlying cases could not be identified, the cases under question were not removed from the regression (and therefore they were not prevented from influencing the regression results). As a consequence, the results presented in Table 7 actually provide a more conservative picture of the effects of mortality salience, gender, abortion attitudes and the interaction among the three on intolerance.

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[58] To accomplish this, dummy variables are created for each case and then the dummy variables are introduced into the regression equation. In essence this procedure removes the cases from the dataset so that the effects of the predictor variables can be calculated without the influence of the extreme cases on the regression results.

[59] To explore the substantive side of outlying cases, the researcher examines the values of the identified cases on the predictor covariates included in the test instrument. I looked for commonality on such variables as beliefs, religiosity, meaning, gender and future outlook, but found none where the three cases reported similar values. To satisfy our prediction that the covariates identified in the survey instrument did not capture the reason for the outlying

Mortality Salience Plus Cognitive Ability Pattern

As noted at the beginning of this chapter, the twelve conditions forming the experimental design for this thesis represent two unique patterns of effects: one that examines the pure effect of mortality salience on intolerance of cultural deviants (the Mortality Salience Pattern) and one that incorporates a second instrument as a potential intervening variable - the performance test of cognitive ability (designed to measure overall cognitive ability). It is the latter set of six conditions that are investigated under the heading of Mortality Salience Plus Cognitive Ability Pattern of conditions.

Table 10 identifies those experimental conditions pertinent for investigation under the Mortality Salience

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case's departure from the regression surface, I introduced the variables into a working regression equation and examined the effect coefficients on the predictor variables comprising the main regression equation. None of the variables under review accounted for the suppression effect of the outlying cases.

Plus Cognitive Ability Pattern of conditions. In all of these experimental conditions the performance test of cognitive ability comes before the dependent variables. Recall that for the Mortality Salience Pattern of conditions, the cognitive test followed the dependent variables in all conditions. The Templer Death Scale varies in its position relative to the dependent variables for the Mortality Salience Plus Cognitive Ability Pattern condition as was also true for the Mortality Salience Pattern conditions.

Table 10: Mortality Salience Plus Cognitive Ability Pattern Conditions

	Type of Anxiety	Position of Scales Relative to the Dependent Variables	
		Cognitive Scale	Templer Scale
1	Mortality	Before	Before
3	Mortality	Before	After
5	Exam Failure	Before	Before
7	Exam Failure	Before	After
9	Control	Before	Before
11	Control	Before	After

Having distinguished this set of experimental conditions, the conditional mean intolerance of cultural deviants for each experimental manipulation (see Table 11) needs to be examined. Recall that these conditional means were presented along with the conditional means from the Mortality Salience Pattern conditions in Table 2 at the outset of this chapter.

Table 11: Conditional Means for Intolerance
Mortality Salience Plus Cognitive Ability Pattern Conditions

F-ratio = 0.38662 p = 0.8574

Type of Anxiety	Experimental Condition	Conditional Mean
Mortality	1	4.82
	3	4.77
Exam-Failure	5	5.23
	7	5.13
Control:	9	4.39
No Anxiety	11	5.20

As the F-ratio of .38662 demonstrates, there is no significant difference in the conditional means of intolerance of cultural outsiders. While the mortality salient conditions (one and three) demonstrate a slightly lower average level of intolerance than the remaining conditions, experimental condition nine reports the lowest of all levels of intolerance. Thus, not only are there no significant differences in the conditional means, but there is also no evidence of the effect of the double dose of death anxiety (as aroused by condition 1 which includes both the open-ended mortality salience manipulation and the forced-choice Templer Death Scale) in eliciting intolerance of cultural deviants.

Why do the results for the Mortality Salience Plus Cognitive Ability Pattern not reflect those witnessed for the Mortality Salience Pattern conditions (specifically that sufficient levels of mortality salience would increase intolerance of cultural deviants)? One possibility is that the test of cognitive ability intervenes between the mortality salience instruments and thus deflects the anxiety aroused by mortality salience from the open-ended manipulation. As noted for conditions six and ten, the Templer Death Scale on its own is insufficient to increase mortality anxiety to a level that evokes behavioral agency (it is as though there is a threshold that must first be crossed before placating strategies are relied upon to eliminate the fear of death). If the cognitive test does interfere with the effect of the open-ended experimental manipulations, it should be possible to detect this interference by looking at the conditional mean performance level on the cognitive test (see Table 12).

Table 12: Conditional Means for Cognitive Test Mortality Salience Plus Cognitive Ability Pattern Conditions

F-ratio = 2.46542 p = .0357 df = 5,138

Type of Anxiety	Experimental Condition	Conditional Mean
Mortality	1	2.50
	3	3.21
Exam-Failure	5	3.21
	7	3.29
Control:	9	3.76
No Anxiety	11	3.81

As shown in Table 12, subjects in experimental condition one perform significantly lower ($p < .05$) on the cognitive test of ability than do subjects in all other conditions. The difference in cognitive ability reported between conditions one and three is extremely perplexing as the conditions, to this point, have the same structural design (open-ended mortality salience questions followed directly by the cognitive test of ability).

To test whether the difference between the two mortality salience conditions is statistically significant a t-test of mean differences is conducted. Results indicate that experimental condition one does not perform significantly lower on the cognitive test than condition three, even though the figures in Table 14 would suggest there is a significant difference between them ($t=-1.466$, $p > .05$)

Because the two conditional means do not differ significantly, and because the two conditions are similar in terms of the design (the cognitive test comes directly after the mortality salience open-ended questions), the experimental conditions can be re-grouped into three categories - one created for mortality salience (conditions 1 & 3), one identified for exam-failure anxiety (conditions 5 & 7), and one defined by no anxiety (conditions 9 & 11). Grouping data in this way provides a more conservative test of the effect of mortality salience on the test of cognitive ability. Table 13 presents the conditional means for cognitive ability by the collapsed regrouping of conditions.

Table 13: Conditional Means for Cognitive Test Mortality Salience Plus Cognitive Ability Pattern Conditions Collapsing Conditions by Type of Anxiety

F-ratio = 4.8422   p = .0092   df = 2,141

Type of Anxiety	Experimental Conditions	Conditional Mean
Mortality	1 & 3	2.89
Exam-Failure	5 & 7	3.24
No Anxiety	9 & 11	3.78

The F-ratio of 4.8422 (p <.01) indicates that, on average, subjects whose mortality is salient perform significantly lower on the test of cognitive ability than do subjects in either the exam-failure or no anxiety experimental conditions.

In addition to the lower level of cognitive ability reported for subjects in the mortality salience conditions, it would appear from Table 13 that subjects in the exam failure conditions did not perform as well as subjects in the no-anxiety conditions. A t-test of mean differences supported this observation: subjects whose anxiety was aroused by the open-ended exam-failure manipulation were impaired in their cognitive abilities, scoring significantly lower levels of cognitive ability than subjects who experienced no arousal of anxiety (t=-1.96, p <.05). This finding indicates that the open-ended manipulation of exam-failure anxiety does raise anxiety to a level sufficient to inhibit performance on a cognitive test.

Prior to the items included in the cognitive ability scale are two additional tests of cognitive ability - one testing logical thinking and one testing comprehension and applied reasoning[60]. A look at the conditional mean performance on the logical thinking question suggests that subjects in experimental condition one perform much higher than all other subjects. In fact, a full 60% of subjects in experimental condition one answered the logic question correctly, compared to an average of 35% for subjects in the other experimental conditions. As observed for the test of cognitive ability (measured by the cognitive test), subjects in experimental condition three behave in an inconsistent pattern with those subjects in experimental condition one. If the groups are collapsed so that mortality anxiety (conditions 1 & 3) is contrasted with exam-failure anxiety (conditions 5 & 7) and no anxiety (conditions 9 & 11), no statistical significance of differences in performance on the logical question ($p >.05$) is found.

On the second question testing comprehension and applied reasoning, subjects from experimental condition one perform the lowest of all conditions (65% correctly responding to the question compared to an average correct response rate of 76% for all other conditions). Again, however, no statistically significant difference is found when mortality anxiety conditions are contrasted with exam-failure and no-anxiety conditions (p >.05).

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[60] See Appendix D for the measurement of these items.

Because of the significant effect of Mortality Salience on the test of cognitive ability, and the lack of evidence for an effect of mortality salience on intolerance of cultural deviants (refer back to Table 11), I questioned whether test performance could be masking the effect of mortality salience on intolerance by itself positively affecting intolerance. In order for this to be true, individuals who perform well on the test of cognitive ability would have to be more intolerant of cultural deviants. This result could occur if subjects who perform well were less distracted by the test and, therefore, more susceptible to the influence of the experimental manipulation. Table 14 contains the results of our test of this hypothesis. The picture that emerges is a complex one, however, since the effect of test performance is quadratic rather than linear and it is conditional on assignment to a specific mortality salience condition (i.e. there is an interaction between the quadratic expression of cognitive ability and mortality salience). In order to clarify the complexity of the interaction between mortality salience and cognitive ability a table of "Fitted Means" in which the expected average level of intolerance given selected values of the independent variables (see Table 15)are presented, following a brief discussion of Table 14.

**Table 14: Final Regression Equation
Outlining the Effect Relationships on Intolerance
Among Mortality Salience Plus Cognitive Ability Conditions**

Predictor Variable	Coefficient (b)	T-Statistic	P-Value
Meaning	0.21	2.241	.0269
Condition1 (C1)	2.72	1.542	.1256
Gender (dmen)	2.79	1.782	.0773
Abortion	0.07	1.061	.2907
I.S.Abortion	-0.26	-1.981	.0499
Cognitive	0.92	1.306	.1939
Cognitive2	-0.15	-1.618	.1082
I.C1.Cognitive1	-2.93	-2.631	.0096
I.C1.Cognitive2	0.50	3.138	.0021

F-ratio = 2.03510 p = .0409 df = 9

Nine predictors of intolerance (as denoted by the variable labels in the first column of the table) can be identified in Table 14. In some ways similar to the regression results for the Mortality Salience Pattern of conditions (see Table 7), there are five simple direct effects on intolerance (meaning, mortality salience [condition 1], gender, abortion, cognitive ability and cognitive ability squared). There are also two simple two-way interactions (one between gender and abortion [I.S.Abortion] and one between mortality salience and the linear expression of cognitive ability [I.C1.Cognitive1]). In addition, there is a complex quadratic term for cognitive test (Cognitive2) which also interacts with mortality salience (I.C1.Cognitive2).

The most significant finding from Table 14 is the interaction between mortality salience (as aroused by experimental condition one) and the quadratic (squared) expression of cognitive ability ($p < .01$). The linear expression of this interaction also achieves significance at the .01 level. A third significant interaction between attitudes toward abortion and gender ($p < .05$) is also observed[61]. Finally, one covariate - existential meaning - is found to directly effect intolerance ($p < .05$). All other variables present in the regression are required due to their participation in higher order interaction terms.

Table 15 (below) presents the complex nature of the quadratic interaction between cognitive ability and mortality salience. These effects are presented in the form of a table of "Fitted Means". Recall from the discussion of fitted means prior to the presentation of Tables 8 and 9, that there are three steps to their calculation.

First, all covariates (that are not expressed as dummy variables and that are not involved in higher-order interactions) are assigned the value of their mean and then multiplied by the effect coefficient (slope) reported in the regression output (Table 14). The products are then added to the intercept.

Second, a value of 1 or 0 is allocated to the dummy variables (in this instance gender and mortality salience) depending on the conditions specified by the cell of the Table.

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[61] Recall that this interaction also achieved significance ($p < .02$) for the Mortality Salience Pattern of conditions (see Table 9).

Finally, values are allocated to the various levels of cognitive ability (low, moderate and high) by partitioning the distribution (on the cognitive test) into thirds and calculating the mean test performance for each third (rounded means equal 1, 3.5 and 6 for low, moderate and high cognitive ability, respectively). The values are then squared and substituted into the structural regression equation. As was true for the calculation of direct effects, the interaction terms are weighted by the slope shown in Table 14 and the products are then added to the sum of the other effects plus the intercept.

Table 15: Fitted Means for the Interaction between Mortality Salience (Condition 1) and the Quadratic Expression of Cognitive Ability

	Cognitive (low)	Cognitive (moderate)	Cognitive (high)
Condition 1	4.70	3.52	6.90
Conditions (3,5,7,9,11)	4.41	5.06	3.76

The main finding from the Table of Fitted Means (Table 15) is that subjects who perform well on the cognitive test and whose mortality has been made salient (by both mortality salience instruments) report, on average, levels of intolerance of cultural deviants a full three points higher than subjects whose mortality anxiety is not aroused. In contrast, subjects with low cognitive ability, regardless of whether their mortality is made salient or not, report an average level of intolerance in the vicinity of 4.5 units.

The quadratic effect of performance and its interaction effect yields a perplexing result for the middle level of performance. Contrary to the expectation that mortality salience would heighten intolerance of cultural deviants for all levels of cognitive ability, it was found that subjects assigned to the mortality salience condition who score only moderately on the cognitive test are 1.5 units more tolerant than subjects in non-mortality salient conditions. As noted in the discussion of the middle group in Tables 8 & 9 for the Mortality Salience Pattern there is no explanatory aid from prior research to explain these findings as Rosenblatt et al (1989) omitted the middle third of subjects from their research.

Before concluding the data analysis portion of our analysis for the Mortality Salience plus Cognitive Ability pattern of conditions, I conducted one final test of the regression results. Specifically I had to ask if the results were an artifact of extreme cases. Results from residual diagnostic tools using Cook's D, leverage values and DFBETA'S, identified one case as extreme.

The removal of the extreme case from the regression (see Table 16) overturned the earlier finding that the quadratic interaction between cognitive ability and mortality salience (as aroused by experimental condition one) significantly influenced individual's intolerance of cultural upholders (p >.05). In fact, the F-ratio of the regression equation is also no longer statistically significant (p >.05), although the p-value just misses statistical significance.

Table 16: Overall Effect on Intolerance
Controlling for Extreme Cases
Mortality Salience Plus Cognitive Ability Pattern

Predictor Variable	Coefficient (b)	T-Statistic	P-Value
Meaning	-0.07	0.964	.3371
Condition1 (C1)	3.05	1.690	.0936
Gender (dmen)	3.36	2.121	.0360
Abortion	0.08	1.070	.2865
I.S.Abortion	-0.31	-2.353	.0202
Cognitive1	0.85	1.187	.2376
Cognitive2	-0.14	-1.429	.1554
I.C1.Cognitive1	-2.53	-1.999	.0478
I.C1.Cognitive2	0.36	1.673	.0969
DC12	4.73	1.022	.3086

F-ratio = 1.7150 p = .0844 df = 10
R-Square = .12150 (12.2%)

While the presence of this case in our dataset certainly calls our findings into question, it is noteworthy that the direction and strength of the coefficients are not altered all that much by the influential case (compare Table 16 with Table 14). Additionally, the interaction between gender and attitudes toward abortion not only maintains its significant function as a predictor of intolerance, but its effect is actually underestimated (suppressed) as a consequence of the presence of the influential case in the dataset.

The exaggeration effect introduced by the presence of the influential case suggests that perhaps it would be best advised to remove the case permanently from the regression (i.e. throw it out of our sample). However, the decision to remove an influential case must be backed by theoretical reasoning. Exploration of a variety of covariates did not uncover any variable that could account for the differential behaviour of the outlying case[62], except with regards to cognitive ability. The influential case significantly outperformed all other cases in experimental condition one, achieving a perfect score on the cognitive test. While it may be argued that the case's departure on cognitive ability demonstrates sufficiently different behaviour from the rest of the sample and therefore gives substantive reason for excluding that subject from the study, it is equally arguable that this subject represents behaviour for a specific subset of cases (those with very high cognitive ability) and therefore the subject's behaviour only appears as a departure as there are no other cases for comparison. As there is not uncontested substantive backing for removing the outlying case, the case was not removed from the regression (and therefore continued to influence the regression results).[63] As a consequence, the results presented in Table 14 possibly overstate the pattern of effects of mortality salience on intolerance of cultural deviants.

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[62] To explore the substantive side of outlying cases, the researcher examines the values of the identified cases on the predictor covariates included in the test instrument. We looked for commonality on such variables as beliefs, religiosity, meaning, gender and future outlook. To satisfy our prediction that the covariates identified in our survey instrument did not capture the reason for the outlying case's departure from the regression surface, we nonetheless, introduced the variables into a working regression equation and examined the effect coefficients on the predictor variables comprising the main regression equation. None of the variables under review accounted for the exaggeration effect of the outlying case.

What Role does the Templer Death Scale Play?

Until now I have omitted a consideration of the role of the Templer Death Scale. It is now time to examine whether or not it operates as the mechanism transferring mortality salience into intolerance of cultural deviants. As the test of cognitive ability interrupts the transmission of mortality salience as elicited by the open-ended manipulation, I will continue to investigate the intervening role[64] of the Templer Death Scale by differentiating between the Mortality Salience Pattern conditions and the Mortality Salience Plus Cognitive Ability Pattern conditions. As the first set of conditions examines the pure effect of mortality salience on intolerance without the complication of the test of cognitive ability, I will begin my discussion with it.

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[63] Note that this decision is consistent with our decision for the Mortality Salience Pattern in which case excluding the outlying cases would have strengthened our findings rather than weakening them as occurs here.

[64] Recall from our discussion in the methods chapter that an intervening variables is one that is directly influenced by some prior causal variable and which also directly affects the dependent variable. Schematically this can be portrayed by the diagram X ---> Z ---> Y where X is a prior causal variable, Z is an intervening variable and Y is

In order to investigate the intervening potential of a variable it is necessary to look at both sides of the causal model: how the manipulation affects the variable of interest, and how the variable of interest affects the dependent variable. Analysis of variance for the effect of the experimental manipulations (conditions 2, 6, and 10)[65] on the Templer Death Scale are presented in Table 17.

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the dependent variable. By this relationship, the intervening variable can be conceived as the mechanism transferring the effect of the experimental manipulation onto the dependent variable (in this case, intolerance of cultural transgressors).

[65] Experimental conditions 2, 6, and 10 have been isolated as they are the only conditions in the Mortality Salience Pattern that have the Templer Death Scale positioned between the open-ended experimental manipulation and the dependent variable; and thus, they are the only conditions that potentially have the Templer Death Scale operating as an intervening variable.

Table 17: Conditional Means on the Templer Death Scale[66] for Mortality Salience Pattern Conditions

F-Ratio = .86392 p = .4257 n = 77

Experimental Condition(s)	Conditional Mean
2	4.72
6	4.04
10	4.58

As the F-ratio (.86392) from Table 17 indicates there is no significant difference in mean levels of fear of death as measured by the Templer Death Scale. Thus, for the Mortality Salience Pattern conditions the first criteria for indication of the Templer Death Scale acting as an intervening variable is not met.

How does the first criterion fare when the intervening potential of the Templer Death Scale for the Mortality Salience Plus Cognitive Ability Pattern Conditions is examined? As I am only interested in the effect of the open-ended experimental manipulation on the Templer Death Scale, conditions 3, 7 and 11 are not involved in the comparison since the Templer Death Scale comes after the dependent variables in these conditions. Thus only conditions 1, 5 and 9 are required to examine the effect of the experimental manipulation on the Templer Death Scale (see Table 18).

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[66] The scale ranges from zero to nine, where zero equals high fear of death and nine represents low fear of death.

Table 18: Conditional Means on the Templer Death Scale for Mortality Salience Plus Cognitive Ability Conditions

F-Ratio = 1.3423 p = .2671 n = 82

Experimental Condition(s)	Conditional Mean
1	4.42
5	3.50
9	3.69

As was true for the Mortality Salience Pattern conditions, there is no statistical sign of conditional differences in levels of fear of death for the Mortality Salience Plus Cognitive Ability Pattern conditions. Subjects in experimental condition one report the highest value on the Templer Death Scale which translates to a security about death (that is, they are less afraid of death than subjects in the other contrasted experimental conditions) although a t-test of mean differences contrasting condition one with the combination of conditions five and nine does not achieve statistical significance ($p > .05$).

Notice, however, that the means in Table 18 are lower than the means in Table 17. In other words, subjects in the Mortality Salience Plus Cognitive Ability Pattern conditions show greater fear of death (as measured by the Templer Death Scale) than do subjects assigned to the pure Mortality Salience Pattern conditions. To test this observation formally, the relevant Mortality Salience Pattern conditions were contrasted with the Mortality Salience Plus Cognitive Ability pattern conditions (see Table 19).[67]

Table 19: Conditional Means for Templer Death Scale Relevant Experimental Conditions

F-ratio = 1.5880 p = .1667 df = 5,153

Type of Anxiety	Experimental Condition	Conditional Mean
Mortality	1	4.42
	2	4.72
Exam-Failure	5	3.50
	6	4.04
Control:	9	3.69
No Anxiety	10	4.58

As Table 19 shows, the differences in conditional means do not achieve statistical significance (p >.05). There does, however, appear to be a greater fear of death as measured by the Templer Death Scale (low values equal greater fear) for conditions belonging to the Mortality Salience Plus Cognitive Ability (conditions 1, 5 & 9) than is true for conditions belonging to the Mortality Salience pattern of conditions (conditions 2, 6, & 10). A t-test of mean differences was therefore conducted to explore this issue further.

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[67] Only those conditions that had the Templer Death Scale positioned after the experimental manipulation (after the cognitive test for conditions in the Mortality Salience Plus Cognitive Ability pattern) and prior to the dependent variables qualify for consideration here. If we refer back to Table 1 at the beginning of the Methods Chapter we see that Conditions 1, 2, 5, 6, 9, & 10 qualify these design requirements.

Table 20: Conditional Means on Templer Death Scale T-Test of Mean Differences - Conditions 1, 5, 9 vs 2,6 10

T-Value = -1.8615   p = .0645   df = 157

Experimental Condition(s)	Conditional Mean
1, 5, & 9	3.84
2, 6, & 10	4.44

The results presented in Table 20 confirm my suspicion that the cognitive test arouses anxiety (as measured by the Templer Death Scale). Subjects who responded to the Templer Death Scale after completing the test of cognitive ability are more afraid of death than subjects who did not have to deal with the cognitive set of questions prior to the Templer Death Scale. This finding supports the earlier interpretation that the exam-failure manipulation (for the Mortality Salience Plus Cognitive Ability pattern) raises sufficient anxiety to impair subject's cognitive ability as compared to the no-anxiety control conditions.

While the combination of the independent investigation of the Mortality Salience Pattern conditions and the Mortality Salience Plus Cognitive Ability pattern conditions as well as a comparative between the two conditions reveals no evidence of the Templer Death Scale operating as an intervening variable, it is still necessary to see whether the Templer Death Scale exerts a direct effect on intolerance of cultural deviants. That is, does the Templer Scale act as a covariate? Table 21 reports the results of the independent effect of the Templer Death Scale on intolerance, controlling for the effect of mortality salience for the Mortality Salience Pattern conditions.

Table 21: Working Regression Equation
The Effect of Templer on Intolerance
Mortality Salience Pattern

Predictor Variable	Coefficient (b)	T-Statistic	P-value
Constant	5.48	10.572	.0000
Templer	-0.07	- 0.610	.5427

F-ratio = .37233 p = .5427

As Table 21 shows, there is no significant direct effect of the Templer Death Scale on intolerance of cultural deviants (p >.05). That is, there is no evidence that the Templer Death Scale intervenes in the effect of mortality salience on intolerance.

The regression results of the effect of the Templer Death Scale on intolerance for the Mortality Salience Plus Cognitive Ability Pattern conditions (presented in Table 22) do reveal, however, that the Templer Death Scale significantly affects intolerance of cultural deviants (significant at the .05 level for a one-tailed test of the null hypothesis)[68].

Table 22: Working Regression Equation
The Effect of Templer on Intolerance
Mortality Salience Plus Cognitive Ability Pattern

Predictor Variable	Coefficient (b)	T-Statistic	P-value
Constant	5.66	11.846	.0000
Templer	-0.18	- 1.665	.0980

F-ratio = 2.7732 p = .0980

Despite this finding, when the Templer Death Scale is introduced into the overall regression equation for the Mortality Salience Pattern conditions, the affect disappears. Thus, apart from this single finding, there is no evidence that the Templer Death Scale either is affected by mortality salience or affects intolerance. Thus, like the findings of Rosenblatt et al (1989), the mechanism by which mortality salience affects intolerance of cultural deviants was not uncovered.

As a consequence of the combination of findings in this past section it must be concluded that the Templer Death Scale does not influence intolerance of cultural deviants nor does it operate as the mechanism transforming mortality salience into behavioral agency. Instead there is evidence that the Templer Death Scale captures a generalized level of anxiety similar to the overt level of death anxiety postulated by Feifel and Branscomb (1973) discussed in the Empirical Application chapter of this thesis.

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[68] We are able to conduct a one-tailed test here because our hypothesis predicted that increased levels of fear of death would increase intolerance of cultural transgressors. Note that a negative slope is support for this finding as the fear of death increases as its value becomes lower.

Joining the Mortality Salience Pattern with the Mortality Salience Plus Cognitive Ability Pattern

Before completing the data analysis phase of this thesis, I wanted to ensure that the splitting of experimental conditions into two groups did not merely capitalize on chance. Table 23 presents a general regression equation that incorporates effects from both the Mortality Salience Pattern regression equation and from the Mortality Salience Plus Cognitive Ability Pattern regression equation (refer back to Tables 7 & 14).

Table 23: Grand Regression Equation
Effects of all Predictor Variables on Intolerance
All Twelve Experimental Conditions

Predictor Variable	Coefficient (b)	T-Statistic	P-Value
Gender (dmen)	2.98	2.761	.0061
Abortion	0.14	2.831	.0050
I.S.Abortion	-0.33	-3.563	.0004
Condition 1	2.29	1.897	.0588
Cognitive1	0.18	0.760	.4478
Cognitive2	-0.05	-1.129	.2601
I.C1.Cognitive1	-2.53	-2.878	.0043
I.C1.Cognitive2	0.43	3.143	.0019
Condition 2	0.24	0.119	.9057
I.C2.Abortion	0.11	0.641	.5219
I.S.C2	-11.65	-2.907	.0039
I.S.C2.Abortion	0.90	2.975	.0032

F-ratio = 4.3476 p = .0000 df = 12
R-Square = .15659 (15.7%)

There are two crucial findings to note in Table 23. First, the three-way interaction between mortality salience (as aroused by experimental condition two), gender, and attitudes toward abortion continues to exert a direct effect on intolerance of cultural deviants at the .01 level of significance. Second, the quadratic interaction between mortality salience (as aroused by experimental condition one) and the squared expression of cognitive ability also remains significant at the .01 level (note that no outlying cases have been removed from the regression).

Other significant interaction effects shown in Table 23 include the interaction between gender and attitudes toward abortion ($p <.001$), the linear interaction between mortality salience (as aroused by condition one) and cognitive ability ($p <.01$), and the interaction between gender and mortality salience (as aroused by condition two) ($p <.01$). In addition to these interaction effects, gender, abortion (both at $p <.01$) and mortality salience (as aroused by condition one) ($p <.05$) exert a direct effect on intolerance of cultural deviants. The permanence of the separate group findings into the larger context lends support not only for the credibility of the separation of pattern effects conducted in this thesis but also for the empirical findings of Terror Management Theory.

SUMMARY DISCUSSION OF RESULTS:

In the preceding section the individual effects of predictor variables, explanatory variables and interaction terms involved in the relationship between mortality salience and intolerance of cultural deviants as reported from the Mortality Salience Pattern of conditions and the Mortality Salience plus Cognitive Ability pattern of conditions were reported. The central findings emerging from these investigations are outlined below.

While I found, in support of Terror Management Theory, that mortality salience increases intolerance of cultural deviants, the results are conditional upon two factors. First, they are qualified by a double dose of mortality salience. Individuals appear to have a certain threshold which must first be crossed before they are motivated to increase intolerance of cultural deviants. The threshold is noticeably operant especially in those instances, such as that at present, wherein subjects are forced to choose between two firmly held beliefs (i.e. rights to freedom of speech and other basic civil liberties on the one hand, and belief in equality and freedom from discrimination on the other hand).

The findings reported in this past chapter are also conditional upon (for subjects in the Mortality Salience Pattern) the subject's gender coupled with his/her initial attitude toward abortion. In particular, it was noted that pro-life males whose mortality is salient are significantly more intolerant of cultural deviants than are their non-mortality salient counterparts. Pro-choice males whose mortality is salient, by contrast, report significantly lower levels of intolerance than pro-choice males whose mortality is not salient. In contrast, females, regardless of their attitudes toward abortion, report higher levels of intolerance toward cultural deviants when their mortality is made salient.

As the initial measure of attitudes toward abortion capture subject's decision to extend women the right to control over their body, this item can be seen in some ways as a proxy measure of subject's willingness to extend basic civil liberties. In addition, item-item correlations of the attitudes toward abortion measure with the items comprising the dependent variable (intolerance) did not substantially differ from the correlation with the abortion dependent measure of civil liberty items. As a consequence it would appear that the abortion scale identifies a general willingness to extend basic civil liberties rather than some aspect unique to the abortion subject.

In the case of subjects in the Mortality Salience Plus Cognitive Ability Pattern, it was found that the effect of mortality salience on intolerance of cultural deviants is conditional upon subject's performance on a test of cognitive ability. That is, subjects who perform well on the test of cognitive ability and whose mortality is made salient are particularly motivated to increase their intolerance of cultural deviants.

The strength of this conclusion is moderated by the fact that a single case significantly exaggerates the estimate of the interaction between the mortality salience condition and the quadratic effect of test performance.

The failure of exam-failure anxiety is another central finding for this research. While there is some evidence that the open-ended exam-failure manipulation raises anxiety (as found in the significant differences on the overt fear of death captured by the Templer Death Scale - see Table 19, and by the significantly different level of cognitive performance between the exam-failure and no-anxiety control condition for the Mortality Salience Plus Cognitive Ability Pattern - see Table 13), the anxiety aroused did not match the levels or quality of the mortality salience conditions. That is, the anxiety related to exam-failure did not sufficiently motivate subjects to increase their intolerance of cultural deviants to levels comparable to those recorded for subjects who experienced mortality specific anxiety. These findings generate support for Terror Management Theory's claim for the uniqueness of the anxiety aroused from the knowledge of death.

I also discovered that the Templer Death Scale did not perform its anticipated role as the mechanism transforming mortality salience into behavioral agency. Instead, there is some suggestion that it captures a generalized form of anxiety, perhaps similar to the anxiety captured by the MAACL (Multiple Affect Adjective Check List) employed by Rosenblatt and Greenberg. When Feifel & Branscomb's work (1973) discussed in the Empirical Application chapter is recalled, I conclude that the indications of anxiety would best fit into their conception of the conscious level of death anxiety, an anxiety that can be captured by such overt measures as the MAACL and Templer Death Scale. I had hoped that the Templer Death Scale would measure the subconscious level of fear of death.

CONCLUSION

Historically, immortality structures have had a very protean character. At times they were represented under the costuming of magical cantations and melodic chants. At other times they were stripped of their cloakings and seemed to disappear altogether. Recently, they have resurfaced disguised in political figures of state or in the divine embodiment of a select social class. But regardless of their form, man has always fabricated symbolic networks to capture and deflect the challenges posed by his mortality. It was the project of this thesis to explore how modern man employed his symbolic construction - culture - to perform the task of protector against those who indirectly stood as outsiders and lay challenge to his beliefs, his power, his immortality.

It is time to evaluate the empirical findings, to re-evaluate the theoretical arguments in light of the empirical findings, to ponder the hypotheses set out in the introductory chapter, and to suggest directions for further research investigations.

DISCUSSION OF THE RESULTS

Taken together the results provide fairly strong support for the hypothesis that subjects whose mortality is made sufficiently salient will be especially motivated to increase their intolerance of cultural deviants - that is, to deny basic civil liberties to individuals they perceive to violate their cultural belief system. This statement can be made more precise by the finding that the motivation to be intolerant is dependent upon two factors - sufficient arousal of mortality salience and, in the case of males, pro-life attitudes toward abortion.

The requirement of sufficient salience, although not present in Rosenblatt et al's (1989) research does find support from research conducted by Gary Schulman (1974). In his experiment, subjects were exposed to a situation in which their sexuality was threatened. They were then given the opportunity to alter their behaviour so that an innocent target was not punished. Experimental conditions varied by the race of the target figure and the race of the individual with whom the target was believed to be sexually involved. Leaving the details aside, the important finding was that in order for the hypothesis to be supported, Schulman found that sexual threat as raised by the knowledge of the interracial sexual relationship (specifically, black male - white female) needed to be heightened by the sexuality of the male target figure (as presented by the target being stripped from the waist upward). Thus, these experimental results also required a double dosage of the manipulation. In addition, the Schulman (1974) study required that subjects choose between punishment of the black target figure and cheating on their performance test (only if they cheated could they prevent shocks being administered to the target figure). The dynamics of choice in this study are equivalent to that presented in this study whereby subjects had to choose between the right to freedom of speech and the right to freedom from discrimination.

The second factor stipulating intolerant behaviour of cultural deviants - males commitment to a pro-life attitude toward abortion - has little theoretical material to draw upon in order to help clarify this finding. It may be that males who hold firm pro-life sentiments are trying to gain control over the reproductive process, which after conception is removed from their personal power. Pro-choice positions directly challenge any residual male power by placing the life-death decision into the female domain. As such when males are excluded from control over the symbolic immortality avenue of socio-biological heredity identified by Lifton. Thus, when awareness of one's mortality is brought into one's consciousness, males may need to deflect the fearsomeness of that knowledge onto some object where they can control it and placate its threat. Now if males are already involved in a power-struggle over their ability to achieve death transcendence vis-a-vis their role as fathers (or potential fathers), it is likely that they will have an intensified need to restore their sense of personal power by exhibiting it over others: denying civil liberties to perceived cultural outsiders becomes their primary outlet in the context of this research.

There are two possible explanations for the high level of tolerance exhibited by males with pro-choice attitudes toward abortion whose mortality had been made salient. On the one hand strongly committed pro-choice males may themselves feel marginalized from the normative social fabric because of their pro-choice beliefs. Thus, they may identify more with the outsider targets presented in the intolerance measure than they do with the symbolic system that identifies the targets as cultural deviants. On the other hand, we may find that a pro-choice disposition is an indication of civil libertarianism. Males who support a woman's freedom of control over her own body may similarly support the extension of all civil liberties, such as freedom of speech measured by the intolerance measure. As a consequence the commitment to freedom of speech or civil libertarianism outweighs the need to displace the anxiety onto a target figure that arises from the knowledge of death.

While this explanation of the intolerance of pro-life males and the contrasting tolerance of pro-choice males may seem somewhat strong, it is not wholly unsupported by Terror Management Theory. In a research paper by Greenberg et al (1990), the authors found that Mortality Salience and authoritarianism interact such that high authoritarianism in the mortality salience condition punish significantly more than high authoritarians in the control condition. Low authoritarians in the mortality salience conditions punish significantly less than low authoritarians in the control condition. Referring to the findings where the bail set for prostitution is the dependent variable, Greenberg et al. suggest that it is unlikely that those findings are restricted to high authoritarians. They suggest, therefore, that low authoritarianism also represents a cultural value of tolerance that the mortality salience condition activates. Drawing a parallel between this result and the interaction between attitudes toward abortion, gender and the mortality salience condition in my experiments, requires that the attitudes toward abortion measure act as a proxy for authoritarianism in the case of men.

Regardless of the interpretation given to the three-way interaction results between mortality salience (as invoked by experimental condition two), gender and attitudes toward abortion, the finding can be simplified to the following statement: Subjects, especially males with pro-life attitudes toward abortion, whose mortality is made sufficiently salient will be motivated to increase their intolerance of cultural deviants.

Support for the hypothesis - that mortality salience motivates subjects to increase their intolerance of cultural deviants - was also generated by the Mortality Salience Plus

Cognitive Ability Pattern of conditions. Once again, the effect is qualified by sufficient arousal of mortality salience. The effects are also conditional upon subjects level of cognitive ability.

Several explanations seem possible for these findings. On the one hand we can postulate a temporal explanation such that subjects in experimental condition one took more time on the logic question, thus their higher success, but then time constraints forced them to speed through the comprehension questions and the remaining items that comprise the cognitive test (therefore their lower scores). This interpretation of the results cannot, however, account for the disparity present between condition one and three which are structurally identical to this point in the survey. However, I do not want to dismiss a temporal explanation too quickly and throw the "baby out with the bathwater". The elusiveness of the hypothetical construct mediating the process of mortality awareness to intolerance of cultural deviants may be in part an artifact of the speed at which our defensive mechanisms are called upon to rid the Self of a transcendental threat.

A competing alternative explanation poses self-esteem as the influential interpreter of behavioral differences. Perhaps subjects in the mortality salient condition feel that the awareness of their mortality threatens their identity (at a symbolic level) and so their self-esteem is jeopardized. In an attempt to revitalize their self-esteem, subjects may be particularly motivated to succeed on the first cognitive item, the logic question. That is, subjects are given an opportunity to take Becker's "heroic solution". The argument now splits into one of two explanations: either subjects presumed their success on the logic question, a presumption sufficient to displace the threat to their self-esteem, and so the level of anxiety associated with the threat to their mortality diminished to such an extent that subjects were no longer motivated to do as well on the remaining cognitive items that comprised the test of cognitive ability; or subjects experienced the futility of their efforts at restoring their self esteem by successfully completing the logic question and so were discouraged from exerting any effort to ensure success on the remaining cognitive items.

A third alternative explanation is also possible. Lifton (1976) suggests that anxiety may shut down symbolic processes. It is possible, therefore, that those individuals who employ an adaptive strategy to anxiety characterized by inertia, may experience such a symbolic shut down and thus be inhibited from successfully answering the cognitive questions which operate at an abstract and symbolic level of functioning. This notion gains additional support from Rank's (1936) concept of the Death Fear which he associates with stagnation. This explanation could interpret the higher level of intolerance found for subjects with low cognitive ability as compared to subjects of moderate cognitive ability in the mortality salience condition, but it cannot account for the approximately equivalent level of intolerance found for subjects with low cognitive ability in mortality salience and non-salience conditions alike.

Lifton (1976) also argues that anxiety can produce a second, and opposite, adaptive strategy - that of enlivening symbolic processes. Once again we can draw a parallel to the work of Rank. He (1936) proposed that a second type of fear[69] - Life Fear - is that which encourages the individual to develop and which comes to us at our creative moments. It is fear that encourages agency. If subjects use this second adaptive strategy evidence of an increased motivational response to the awareness of death should be witnessed. The findings of the mortality salient condition (experimental condition one) when subjects succeed on the cognitive test of ability (i.e. achieve high scores) support this second adaptive strategy as this subject group report the highest level of intolerance toward culturally defined outsiders.

Support for the second hypothesis directing this thesis - that exam failure anxiety would not be sufficient to increase intolerance of cultural deviants - is also generated by the current research. An examination of the Mortality Salience Pattern of conditions reveals that exam-failure anxiety conditions do not significantly differ from the control conditions in inducing heightened levels of intolerance of cultural deviants. It was found, however, (in consideration of the Mortality Salience plus Cognitive Ability Pattern conditions) that exam-failure anxiety was being elicited sufficiently to increase fear of death (as measured by the Templer Death Scale) when compared to subjects in control conditions. It was also found to impair cognitive ability (as measured by the Cognitive Test). It did not raise anxiety to the same levels as experienced by subjects in mortality salience conditions.

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[69] Note that the first type of fear was Death Fear.

The finding of exam-failure anxiety as aroused by the exam-failure open-ended manipulation receives additional support from the visual observation of anxiety clearly being generated by the Cognitive Test. In fact, signs of anxiety were so evident that it was possible to detect, from the front of the classroom, when subjects began the cognitive questions. This behaviour supports the assumption that experimental realism was adequately induced to test exam failure anxiety. Despite the realism of the situation, however, subject's were not motivated to increase their intolerance of cultural deviants in the exam failure anxiety conditions. And thus, as found earlier for the Mortality Salience Pattern of conditions, the specificity of the mortality awareness was reinforced.

The observance of the frustrated behaviour enables us to test a competing theoretical position: that of frustration-aggression theory. It has been offered by theorists, and subjects during debriefing sessions, that perhaps all that is being captured in this research is that consciousness of one's mortality frustrates the subject and therefore the individual needs to assuage that frustration by behavioral aggression: thus the increased assignment of punishment to prostitutes in Rosenblatt et al's findings, and the increased intolerance of cultural deviants here. However, even when obvious indications of frustration (such as heavy sighing, running hands through hair in a very determined fashion, mad erasing, etc.) are observed, the results demonstrate that motivation for intolerance of cultural deviants was insufficiently aroused. These observations contest a frustration-aggression interpretation of the data.

Together these are key findings for Terror Management Theory as researchers working under this heading have never questioned their reliance on the uniqueness of mortality anxiety as a catalyst for behavioral change. The finding from this thesis that another form of anxiety, even one especially pertinent to the subjects, does not evoke the same response as mortality anxiety strengthens the support for the specificity of mortality anxiety proclaimed by

Terror Management Theory.

One final area of interest for this research was the search for the mechanism that transformed mortality salience into intolerance (unwillingness to extend basic civil liberties) of cultural deviants. I had proposed, in agreement with Rosenblatt et al (1989) that the mechanism would be mortality anxiety (as measured by the Templer Death Scale). However, there is no support for the Templer Death Scale performing this function in either of the subset of pattern of effects. As a consequence of these findings I am forced to conclude that the modifications introduced into this thesis are insufficient to resolve the central limitation of current Terror Management Theory: that is, the mechanism which produces the behavioral change registered in the dependent variable remains unidentified. Nonetheless, the modifications introduced in this thesis (specifically the test of a second form of anxiety) rule out generalized frustration as the mechanism, and perhaps even generalized anxiety.

A RE-APPRAISAL OF THEORY

I wish to re-appraise the theoretical issues raised in this paper by first isolating Terror Management Theory, as it is evidently the most crucial theoretical position for the research conducted, and then discuss in general terms the broader theoretical arena.

The re-evaluation of Terror Management Theory can best be seen to revolve around three questions: (1) Is there continued empirical support?; (2) Is anxiety involved?; and (3) Is there evidence that culture operates as an anxiety buffer? As far as the first question is concerned, I think this thesis provides qualified support for the previous indications that mortality salience induces motivation for behavioral change. Rosenblatt et al (1989) found that this motivation could lead to increased punishment of prostitutes and increased benevolence of heroes. Greenberg et al (1990) found that mortality salience could lead subjects to increase liking of similar others and decrease liking of dissimilar others. And Solomon et al (in press) found that it could be employed to influence candidate selection in political election polls. This research contributes to their work by extending the results to a different empirical context; extending civil liberties to another class of cultural deviants.

A second contribution of this research is the finding that only mortality salience generates behavioral change. Until this research, Terror Management Theory had assumed the specificity of anxiety associated with mortality, but had made limited effort to test competing hypotheses. In particular, they did not compare the effect of mortality induced anxiety with other anxiety eliciting situations. The second question posed above - Is anxiety involved? - is a more difficult question to answer. The Templer Death Scale was introduced into this thesis in part to measure death anxiety and in part to act as an additional source of mortality salience.

If the Templer Death Scale does capture a generalized form of anxiety, then the identification of the two Templer Death Scale factors - one capturing anxiety and one capturing the physical aspect of death - may shed some light here. But there was no evidence of correlation between the anxiety and physical subscales and intolerance of cultural deviants. Nor was there any statistical evidence of interaction between the experimental condition and either of the scales. I did find, however, the suggestion of a pattern among the mortality salience conditions (conditions 1 through 4). Specifically, experimental condition two reported a substantially lower level of intolerance on the physical dimension of fear of death than the other mortality salience conditions. By contrast, experimental condition two revealed a substantially higher level of intolerance on the anxiety dimension of fear of death. Although these differences did not attain statistical significance, the behavioral differences persuaded us to create interaction terms between experimental condition two and the physical dimension of fear of death, and between experimental conditions one, three and four and the anxiety dimension of fear of death. Our investigations revealed a nearly statistical significant interaction (p=.0779) between experimental condition one and the physical dimension of fear of death. The finding was in the predicted direction that mortality salience (as aroused by condition one) increased fear of death (as measured by the physical dimension of the Templer Death Scale). However, it is the consequence of only preliminary investigations and obviously further research in this area is required. Until content analysis of the open-ended mortality salience questions is completed it is doubtful that light will be shed on the complexity of the relationship between anxiety and physical fear of death and how these aspects manifest themselves as motivators of intolerance of cultural deviants.

Nonetheless, the evidence derived from this thesis combined with the fact that Rosenblatt et al (1989) are unable to find either conscious or physiological measures of anxiety in their experimental work, leans this researcher toward favouring a construct other than anxiety as the intervening variable, quite possibly, in light of the multi-dimensionality and preliminary findings of the Templer Death Scale, fear in a Heideggerian sense. However, until the various levels of operation of the fear of death are differentiated, specifically the distinction between conscious level, fantasy level and subconscious level, as outlined by Feifel and Branscomb (1973), the suspected conceptual differences between fear and anxiety will not be sufficient to capture the mechanism involved.

It is worth noting that the discussion of the various dimensions of fear of death (the different levels, and the distinctions between physical fear and anxiety) has overlooked the complexity of the challenge that lay ahead for anyone attempting conceptual clarification. The mechanism is obviously very illusive, as conscious and physiological measures of anxiety have yet to pick up traces of anxiety even though the measures employed are very reliable measuring instruments, and therefore it will be a difficult task to create new measurements that are precise enough to capture the subtleties defining the differences between fear and anxiety.

The third and final question to be raised in a re-appraisal of Terror Management Theory, is whether or not this thesis has provided sufficient evidence to conclude that culture operates as an anxiety buffer. Terror Management Theory postulates that the identification by individuals with a particular symbolic meaning system enables them to detract any challenges to the individual's attainment of symbolic death transcendence (Rosenblatt et al 1989). Culture - as the configuration of symbolic meaning systems - operates as this defense system. The cultural anxiety buffer referred to by Terror Management Theory is said to be comprised of two constituents; an identification with the viability of the cultural framework and a belief that our identification is sufficient to warrant us "insider" status (Rosenblatt, 1989).

The first area to be addressed in answering whether this thesis has sufficiently measured the anxiety buffering property of culture, is to determine whether or not Canadian culture has been captured in the reference term for the definition of the "outsider", the cultural deviant. Defining Canadian society by such phrases as: a country that is "respectful of differences", a society of "freedom, tolerance and compassion"; and a community that has a "many-sided character" (Canadian Constitutional Proposal, 1991); supports the selection of individuals such as racists, fascists and, to a lesser extent, atheists as violators of the Canadian cultural identity.

While there is convincing face validity that the dependent variable successfully captures targets who oppose the Canadian cultural system, the only possible measure of identification of different cultural worldviews is the initial Attitudes Toward Abortion measure which has only weak face validity and clarifies the intolerant behaviour produced by mortality salience only for males. Despite this weakness of the abortion instrument, it does appear to behave similarly with respect to specific abortion dependent items as with the other intolerance items. On this basis, it has some credibility as a variate of differential commitment to the concept of civil liberty, though other measures more clearly identifying initial tendencies to extend civil liberties would have been desirable.

Currently additional research (questions were included on the Edmonton Area Survey conducted by the University of Alberta Population Research Laboratory) is being conducted that incorporates a predictor variable specifically addressing initial attitudes toward individual's right to freedom of speech. This research has the added advantage of being conducted on a general population so it will soon be able to address the generalizability of the denial of death hypothesis.

Finally it is necessary to decide whether the cultural worldview to which the subjects in this experiment seemed to identify is being employed as a buffer against the mortality threats. There is no obvious conclusion to be made here. However, since subjects in heightened mortality salience conditions did become more intolerant of cultural "outsiders" it is possible that at some point, consciously or subconsciously, the subjects make reference to their cultural worldview in determining whether or not to assuage their fear onto the presented targets. In retrospect it would have been useful to include a target that was not definable as an "outsider" to compare whether reference to a cultural system is being conducted and whether subjects discern that the target is a threat to the viability of their cultural worldview. An examination of the degree of admiration for public personalities, representing heroes, villains and fools, (a second dependent variable present in the survey instrument) may address this issue.

THEORETICAL DIRECTIONS

Let us now turn to a re-appraisal of the other theoretical positions presented in this paper. In particular I argue that Terror Management Theory has limited itself theoretically by excluding contributions from other disciplines. Second, I consider the viability of the "collective solution" and the consequences of man's faith in culture when the unity of culture fragments.

I claimed in the introduction to this thesis that one of the shortcomings of Terror Management Theory is its failure to extend beyond the theoretical ideas of existential psychology and consider compatible theoretical arguments from disciplines like sociology and existential philosophy. Even when Terror Management Theory makes reference to the psychological theoretical position it excludes an account of one of the most important features of Becker's theory - the fetishization of evil. In fact, for a theory that is so dependent upon the notion of the fetishization of evil, it is noteworthy that not even a single paragraph is allotted to the discussion of this topic. In order to overcome this neglect in Terror Management Theory, this thesis devoted a considerable portion of the conceptual chapter examining the processes involved and underriding the fetishization of evil.

One of the most remarkable findings is the extent to which the topic had been covered outside of Becker's Denial of Death Hypothesis. The ideas of Lifton's victimization and Durkheim's social construction of deviance in particular shed great insight into our understanding of the process of defining evil in the Other so as to maintain solidarity in the immortality power of one's own culture.

Heidegger's account of the Other as an inadequate informant of death and Sartre's interpretation of our appeal to the "they" for an understanding of death is also important as these notions support not only the unfamiliarity of death for the individual (a position central to the definition of anxiety which Rosenblatt et al [1989} pose as the mechanism transporting mortality awareness into behavioral agency) but also strengthens Terror Management Theory's postulate that man's fear of death is resolved by his identification with culture.

From the extensive treatment of the notion of anxiety I noted the central connection of cultural stability and individual anxiety as introduced by Rollo May (1983). It is now necessary to elaborate upon this connection as it will be an important consideration for future research.

Swidler (1986) introduces a useful contribution to the understanding of culture by detailing the relationship between cultural stability and individual action on the basis of its historical character. In settled periods (moments of political, historical and economic stability) culture independently influences action. Values and belief systems have become so entrenched and unchallenged that individuals act without consultation to the ideas which are governing their behaviour. This does not suggest that culture imposes a "single, unified pattern on action, in the sense of imposing norms, styles, values, or ends on individual actions [but] rather, settled cultures constrain action by providing a limited set of resources out of which individuals and groups construct strategies of action" (1986:281). By contrast, during unsettled periods, various ideologies are in contention and so culture assumes a much more active role. In fact, it has a direct influence upon action. During such circumstances the individual actor has a wide variety of resources at his disposal from which to construct his strategy for action.

Durkheim's position is similar to that of Swidler, but he emphasizes the consequence such cultural influences have upon the individual. According to Durkheim (1961), individuals attain a personal sense of meaning by their identification as a member of a particular society. During times of massive social change, however, the social anchor is dislodged and the individual suddenly finds himself in terror as he confronts the infinite of possibility before him. Now the individual no longer has his culture to protect him and he is overwhelmed by a sense of "anomia" or "freedom". Symbolically, this is man's direct confrontation with death. There are no solutions (neither collective nor heroic) to guide his actions, he can only wait for the cultural stability to return so that once again he can disillusion himself and strive for immortality.

A similar position is held by Berger and Luckman (1967). They observe that "the institutional order represents a shield against terror. To be anomic, therefore, means to be deprived of this shield and to be exposed, alone, to the onslaught of nightmare"(101). The following quote captures not only the flavour of the role of culture and our terror of death but also expresses the similarity in thought between Durkheim, Kierkegaard, and these theorists:

> On the level of meaning, the institutional order represents a shield against terror. To be anomic, therefore, means to be deprived of this shield and to be exposed, alone, to the onslaught of nightmare. While the horror of aloneness is probably already given in the constitutional sociality of man, it manifests itself on the level of meaning in man's incapacity to sustain a meaningful existence in isolation from the nomic constructions of society. The symbolic universe shelters the individual from ultimate terror by bestowing ultimate legitimation upon the protective structures of the institutional order (Berger & Luckman, 1967:101-102).

The association of death and freedom or infinite possibility present in Durkheim clearly echoes the ideas of Kierkegaard. Kierkegaard argues that during times of social chaos, the balance of the synthetic characteristics of self are disrupted and the self is thrown into a state of despair. The despair arises because man is forced to realize that his identification with culture has been at the expense of the true development of his self. While the collective solution may temporarily alleviate the fear of death, Kierkegaard forces us to recognize that it neither eliminates that fear nor brings man any closer to the achievement of meaning. Instead life merely becomes empty, meaningless and estranged. He powerfully conveys the strange irony of our sacrifice of self in pursuit of the collective solution to death:

> The biggest danger, that of losing oneself, can pass off in the world as quietly as if it were nothing; every other loss, an arm, a leg, five dollars, a wife, etc., is bound to be noticed (1989:62-62).

Sartre similarly argues that the only transcendence the individual achieves is through the selective control by the Other.

> In reality the relation with the dead - with all the dead - is an essential structure of the fundamental relation which we have called "being-for-others". In its upsurge into being, the for-itself must assume a position in relation to the dead; his initial project organizes them in large anonymous masses or as distinct individualities. And for these collective masses as for these individualities he determines their removal or their absolute proximity; he unfolds temporal distances between them and himself by temporalizing himself just as he unfolds spatial distances in terms of his surroundings (Sartre, 1956:693).

Sartre suggests here that not only does the meaning of the self cease to exist at the moment of no-longer-being, but that any interpretation of the self's contribution to the larger symbolic order exists only as the Other wishes to make the deceased's life contribute. If the Other forgets the self, the self - regardless of the personal meaning it held while alive - becomes devoid of meaning. It is similar to the distinction made in Chinese burial grounds between the "new" dead and the "old" dead. The new dead still have Others who remember them and pay tribute to them; the old dead no longer have any representative in the present time - they are no longer connected to the existing Other.

Despite the affinity among these theoretical positions, none of them explicitly draw out the dialectical nature between individuation and collective definition of self. We must remember, that when all is said and done, each individual alone faces his mortality - without help from the Other, without a reason from Culture, without any aid from past experience.

In this past section, and in the conceptual chapter in general, insights were drawn from a wide number of theorists working under the umbrella of three, supposedly distinct, theoretical domains - social psychology (in both sociology and psychology), existential philosophy, and sociology. But as the various topics governing the theoretical chapter were discussed, the distinctiveness of the domains disappeared and a remarkable affinity among ideas emerged. It is hoped that future research in this area will continue to dismantle the artificial boundaries separating disciplines. The result will be a much richer theoretical framework.

SUGGESTIONS FOR FUTURE RESEARCH

In deciphering the complex web of findings, several questions remain unanswered. For instance, Does increased intolerance of cultural deviants successfully deploy incoming threats to our existence?; Does mortality awareness induce anxiety or fear?; and, Do we increase our "fetishization of evil" practices during periods of cultural instability? It will be the project of future research to tackle these questions.

In addition to the suggestions for future research posed throughout this concluding chapter, upcoming research will also need to try different manipulations of mortality salience that operate at a more subconscious level of arousal in order to determine whether mortality salience must be conscious before we invoke our defense strategies to deflect the truth of our mortality. One possibility is to construct a collage of death images from films. By this strategy it is possible to create different manipulations such as personally threatening death images as compared to culturally threatening images as posed by nuclear annihilation in order to determine if man responds differently to the knowledge of personal extinction compared to cultural disintegration.

Another possibility for future research is to conduct a cross-national study in which the generalizability of cultural systems operating as buffers to the knowledge of death can be examined. The discussion of May, Swidler and Durkheim would suggest that the cultural structure has a significant influence on the anxiety experienced by the individual and thus we could evaluate, by stratifying cultures according to stability, cohesiveness, and political orientation, what symbolic structures are most effective in allaying the fears of limitedness.

There are as many questions being generated as those being answered by this thesis; a consequence of the relatively unchartered terrain being traversed. The richness of the area should lead to a vibrant and energetic venture of both the theoretical and empirical areas. We are fortunate to be in the midst of transformation - immortality through religion has taken a second seat to immortality through identification with culture, though this latter agent of immortality power may also be breathing its last omnipotent breath. What next? I leave you with a thought from Durkheim:

> The old gods are growing old or already dead, and others are not yet born. ... But this state of incertitude and confused agitation cannot last for ever. A day will come when our societies will know again those hours of creative effervescence, in the course of which new ideas arise and new formulae are found which serve for a while as a guide to humanity ... (Durkheim: 1961:475).

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APPENDIX A
MEASUREMENT OF DEPENDENT VARIABLE

INTOLERANCE OF CULTURAL TRANSGRESSORS:

"ATHEISM" SUB-SCALE:

1. Suppose someone is against all churches and religions.

   a. If such a person wanted to make a speech in your community against churches and religion, should s/he be allowed to speak?

      i) Yes, allowed to speak
      ii) No, not allowed to speak

   b. Should such a person be allowed to teach at a college or university?

      i) Yes, allowed to teach
      ii) No, not allowed to teach

   c. If such a person had written a book against churches and religions and a copy of the book was in your community's public library, would you favour the removal of the book?

      i) Yes, remove the book
      ii) No, do not remove the book

"RACISM" SUB-SCALE:

2. Suppose that someone believes that non-whites are genetically inferior to whites.

   a. If such a person wanted to make a speech in your community against churches and religion, should s/he be allowed to speak?

      i) Yes, allowed to speak
      ii) No, not allowed to speak

   b. Should such a person be allowed to teach at a college or university?

      i) Yes, allowed to teach
      ii) No, not allowed to teach

c. If such a person had written a book against churches and religions and a copy of the book was in your community's public library, would you favour the removal of the book?

   i) Yes, remove the book
   ii) No, do not remove the book

d. Should such a person be allowed to manufacture and sell "lapel pins" or other gimmicks that proclaim the inferiority of non-whites?

   i) Yes, allowed to sell pins
   ii) No, not allowed to sell pins

"FASCISM" SUB-SCALE:

3. Consider a person who argues that the Holocaust in Germany during World War II (the execution of an estimated six million Jewish people) never occurred.

a. If such a person wanted to make a speech in your community against churches and religion, should s/he be allowed to speak?

   i) Yes, allowed to speak
   ii) No, not allowed to speak

b. Should such a person be allowed to teach at a college or university?

   i) Yes, allowed to teach
   ii) No, not allowed to teach

c. If such a person had written a book against churches and religions and a copy of the book was in your community's public library, would you favour the removal of the book?

   i) Yes, remove the book
   ii) No, do not remove the book

APPENDIX B
MEASUREMENT OF DEATH ANXIETY: THE TEMPLER DEATH SCALE

Please circle either TRUE or FALSE depending on whether you agree or disagree, respectively, with the statement.

1. With regard to death, I am unprepared and frightened.

   TRUE FALSE

2. I am very much afraid to die.

   TRUE FALSE

3. I am not afraid of getting cancer.

   TRUE FALSE

4. The thought of death never bothers me.

   TRUE FALSE

5. I fear dying a painful death.

   TRUE FALSE

6. The uncertainty of life after death troubles me greatly.

   TRUE FALSE

7. I am really scared of having a heart attack.

   TRUE FALSE

8. The sight of a dead body is horrifying to me.

   TRUE FALSE

9. I feel that the future holds nothing for me to fear.

   TRUE FALSE

APPENDIX C
MEASUREMENT OF COGNITIVE ABILITY: THE COGNITIVE TEST

For each of the capitalized words on the left, circle the word on the right which you think comes closest tot the meaning of the word in capital letters.

a. ANIMOSITY: 1. hatred 2. animation 3. disobedience
4. diversity 5. friendship

b. CLOISTERED: 1. miniature 2. bunched 3. arched
4. malady 5. secluded

c. CAPRICE: 1. value 2. a star 3. grimace
4. whim 5. inducement

d. ALLUSION: 1. reference 2. dream 3. eulogy
4. illusion 5. aria

Following are pairs of CAPITAL words. After each pair are five selections of word pairs. Circle the letter corresponding to the word pair which best reflects the relationship between the two words in capital letters.

Example: MONKEY:BANANA

1. dog:wolf
2. cat:paw
3. lion:den
4. deer:sheep
5. cows:grass

The correct response would be number 5 (cows:grass)

a. CLASP:BRACELET

1. hook:coat
2. buckle:belt
3. diamond:ring
4. wrist:watch
5. cuff:trousers

b. PROCTOR:SUPERVISE

1. prophet:rule
2. profiteer:consume
3. profligate:demand
4. prodigal:squander
5. prodigy:wonder

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c. AMORPHOUSNESS:DEFINITION

1. lassitude:energy
2. spontaneity:awareness
3. angularity:intricacy
4. rectitude:drabness
5. precision:uniformity

d. INELUCTABLE:AVOID

1. ineffable:utter
2. impalpable:desire
3. impermeable:endure
4. irascible:provoke
5. irreconcilable:estrange

APPENDIX D
MEASUREMENT OF LOGICAL THINKING AND COMPREHENSION QUESTIONS

LOGICAL THINKING QUESTION

Seven piano students - T, U, V, W, X, Y, and Z - are to give a recital, and their instructor is deciding the order in which they will perform. Each student will play exactly one piece, a piano solo. In deciding the order of performance, the instructor must observe the following restrictions:

X cannot play first or second
W cannot play until X has played
Neither T nor Y can play seventh
Either Y or Z must play immediately after W plays
V must play immediately after or immediately before U plays

If V plays first, which of the following MUST be true?

a. T plays sixth
b. X plays third
c. Z plays seventh
d. T plays immediately after Y
e. W plays immediately after X

COMPREHENSION & APPLIED THINKING QUESTION

Different times breed different difficulties. The tragedy peculiar to modern life is the sense of alienation that comes from the increasing intellectual isolation imposed by our form of the division of labour. There once was a time when people could understand each other's work - if not move freely from one sort of job to another. Now that is impossible. Everything is so technical that everybody else's job is a mystery to us.

Which of the following can be validly inferred from facts or premises expressed in the above passage? Based on your conclusions, circle one of the answers numbered "a" through "e".

I. The division of labour in itself is a bad thing.
II. Modern life is characterized by a special form of alienation.
III. Life is worse now than it used to be.

a. I only
b. II only
c. III only
d. I and II only
e. I, II and III

APPENDIX E
MEASUREMENT OF ATTITUDES TOWARD ABORTION

The Canadian government is currently undecided as to what legislation it should pas with regards to the issue of abortion. Do you think it should be possible for a pregnant woman to obtain a legal abortion if ... Please circle the response which best reflects your attitude for EACH statement.

1. If she is married and doesn't want any more children?

Strongly Agree	Agree	Neutral	Disagree	Strongly Agree
1	2	3	4	5

2. If the couple doesn't like the sex of the fetus?

Strongly Agree	Agree	Neutral	Disagree	Strongly Agree
1	2	3	4	5

3. If the family has a very low income and can't afford to raise any more children?

Strongly Agree	Agree	Neutral	Disagree	Strongly Agree
1	2	3	4	5

4. If the woman becomes pregnant as the result of a rape?

Strongly Agree	Agree	Neutral	Disagree	Strongly Agree
1	2	3	4	5